

PROJECT ID: PMN06011997

SAMPLE ID: NO SAMPLE ID

descriptor: PESTICIDE
MONITORING NETWORK

IDEML

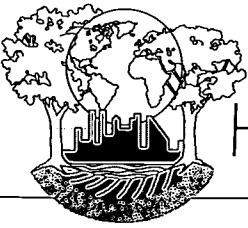
DK 12254 - DK 12255, DK 12257 - DK 12259, DK 12262 - DK 12268,
DK 12272, DK 12277 - DK 12283, DK 12352, DK 12526, DK 12533 -

DK 12534



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LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Groundwater Section
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

Report #: 397519-719+741-743

Priority: Standard Written

Status: Final

Project : DK 12254 - DK 12255, DK 12257 - DK 12259, DK 12262 - DK 12268, DK 12272
DK 12277 - DK 12283, DK 12352, DK 12526, DK 12533 - DK 12534

Samples Submitted: Twenty-four groundwater samples

Copies to: None

Collected: 03/12 to 03/14/99 By: Client Received: 03/17/99

REPORT SUMMARY

Twenty-four groundwater samples were submitted for analysis of Task 4A, 2,4-D and Carbofuran (Enzyme Immunoassay), Pesticides (Method 525.2), Chlorinated acids (Method 515.1) and Carbamates (Method 531.1) and Task 2B, Nitrate-nitrite (Method 353.2).

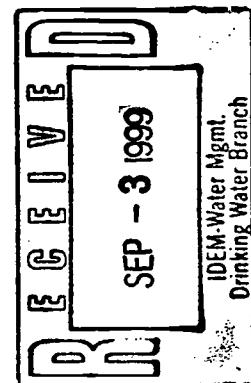
The following is a summary of the results by sample. Any tentatively identified compounds are indicated with a (¥).

2,4-D Enzyme Immunoassay (Case Narrative)

Analytical results were designated as reportable based on the associated quality control samples.

2,4-D Enzyme Immunoassay (Results Summary)

DK 12254	2,4-D was not detected in the sample submitted for analysis.
DK 12255	2,4-D was not detected in the sample submitted for analysis.
DK 12257	2,4-D was not detected in the sample submitted for analysis.
DK 12258	2,4-D was not detected in the sample submitted for analysis.
DK 12259	2,4-D was not detected in the sample submitted for analysis.
DK 12262	2,4-D was not detected in the sample submitted for analysis.
DK 12263	2,4-D was not detected in the sample submitted for analysis.



2,4-D Enzyme Immunoassay (Results Summary) - Cont'd

DK 12264	2,4-D was not detected in the sample submitted for analysis.
DK 12265	2,4-D was not detected in the sample submitted for analysis.
DK 12266	2,4-D was not detected in the sample submitted for analysis.
DK 12267	2,4-D was not detected in the sample submitted for analysis.
DK 12268	2,4-D was not detected in the sample submitted for analysis.
DK 12272	2,4-D was not detected in the sample submitted for analysis.
DK 12277	2,4-D was not detected in the sample submitted for analysis.
DK 12278	2,4-D was not detected in the sample submitted for analysis.
DK 12279	2,4-D was not detected in the sample submitted for analysis.
DK 12280	2,4-D was not detected in the sample submitted for analysis.
DK 12281	2,4-D was not detected in the sample submitted for analysis.
DK 12282	2,4-D was not detected in the sample submitted for analysis.
DK 12283	2,4-D was not detected in the sample submitted for analysis.
DK 12352	2,4-D was not detected in the sample submitted for analysis.
DK 12526	2,4-D was not detected in the sample submitted for analysis.
DK 12533	2,4-D was not detected in the sample submitted for analysis.
DK 12534	2,4-D was not detected in the sample submitted for analysis.

Carbofuran Enzyme Immunoassay (Case Narrative)

Analytical results were designated as reportable based on the associated quality control samples.

Carbofuran Enzyme Immunoassay (Results Summary)

DK 12254	Carbofuran was not detected in the sample submitted for analysis.
DK 12255	Carbofuran was not detected in the sample submitted for analysis.
DK 12257	Carbofuran was not detected in the sample submitted for analysis.

Carbofuran Enzyme Immunoassay (Results Summary) - Cont'd

DK 12258 Carbofuran was not detected in the sample submitted for analysis.

DK 12259 Carbofuran was not detected in the sample submitted for analysis.

DK 12262 Carbofuran was not detected in the sample submitted for analysis.

DK 12263 Carbofuran was not detected in the sample submitted for analysis.

DK 12264 Carbofuran was not detected in the sample submitted for analysis.

DK 12265 Carbofuran was not detected in the sample submitted for analysis.

DK 12266 Carbofuran was not detected in the sample submitted for analysis.

DK 12267 Carbofuran was not detected in the sample submitted for analysis.

DK 12268 Carbofuran was not detected in the sample submitted for analysis.

DK 12272 Carbofuran was not detected in the sample submitted for analysis.

DK 12277 Carbofuran was not detected in the sample submitted for analysis.

DK 12278 Carbofuran was not detected in the sample submitted for analysis.

DK 12279 Carbofuran was not detected in the sample submitted for analysis.

DK 12280 Carbofuran was not detected in the sample submitted for analysis.

DK 12281 Carbofuran was not detected in the sample submitted for analysis.

DK 12282 Carbofuran was not detected in the sample submitted for analysis.

DK 12283 Carbofuran was not detected in the sample submitted for analysis.

DK 12352 Carbofuran was not detected in the sample submitted for analysis.

DK 12526 Carbofuran was not detected in the sample submitted for analysis.

DK 12533 Carbofuran was not detected in the sample submitted for analysis.

DK 12534 Carbofuran was not detected in the sample submitted for analysis.

EPA 525.2 (Case Narrative) (AE040299A)

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

CCC: Recovery of fenamiphos in the first CCC at 1.0 µg/L was biased high outside the acceptance limits of 70-130% recovery. Recovery of simazine in the second CCC at 1.0 µg/L was biased high outside the acceptance limits of 70-130% recovery.

LFB: Recoveries of bromacil and simazine in the LFB at 1.0 µg/L were biased high outside the acceptance limits of 70-130% recovery.

SS: One of four SS recoveries for samples DK 12258 and DK 12264 were biased high outside the acceptance limits of 70-130% recovery due to matrix interference.

EPA 525.2 (Results Summary) (AE040299A)

DK 12254	None of the requested parameters were detected in the sample submitted for analysis.
DK 12255	None of the requested parameters were detected in the sample submitted for analysis.
DK 12257	None of the requested parameters were detected in the sample submitted for analysis.
DK 12258	None of the requested parameters were detected in the sample submitted for analysis.
DK 12259	None of the requested parameters were detected in the sample submitted for analysis.
DK 12262	None of the requested parameters were detected in the sample submitted for analysis.
DK 12263	None of the requested parameters were detected in the sample submitted for analysis.
DK 12264	None of the requested parameters were detected in the sample submitted for analysis.
DK 12265	None of the requested parameters were detected in the sample submitted for analysis.
DK 12266	None of the requested parameters were detected in the sample submitted for analysis.
DK 12267	None of the requested parameters were detected in the sample submitted for analysis.
DK 12268	None of the requested parameters were detected in the sample submitted for analysis.

EPA 525.2 (Results Summary) (AE040299A) - Cont'd

DK 12272 None of the requested parameters were detected in the sample submitted for analysis.

EPA 525.2 (Case Narrative) (AE040399A)

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

CCC: Recovery of fenamiphos in the first CCC at 1.0 µg/L was biased high outside the acceptance limits of 70-130% recovery.

LFB: Recoveries of bromacil and simazine in the LFB at 1.0 µg/L were biased high outside the acceptance limits of 70-130% recovery.

MS/MSD: Recoveries of bromacil and fenamiphos in the MS and MSD of sample DK 12526 were biased high outside the acceptance limits of 70-130% recovery due to matrix interference.

SS: One of four SS recoveries for sample DK 12280 was high biased outside acceptance limits of 70-130% due to matrix interference.

EPA 525.2 (Results Summary) (AE040399A)

DK 12277 None of the requested parameters were detected in the sample submitted for analysis.

DK 12278 None of the requested parameters were detected in the sample submitted for analysis.

DK 12279 None of the requested parameters were detected in the sample submitted for analysis.

DK 12280 None of the requested parameters were detected in the sample submitted for analysis.

DK 12281 Sulfur, molecular ‡ ~ 44 µg/L

None of the requested parameters were detected in the sample submitted for analysis.

DK 12282 None of the requested parameters were detected in the sample submitted for analysis.

DK 12283 None of the requested parameters were detected in the sample submitted for analysis.

DK 12352 None of the requested parameters were detected in the sample submitted for analysis.

DK 12526 None of the requested parameters were detected in the sample submitted for analysis.

EPA 525.2 (Results Summary) (AE040399A) - Cont'd

DK 12533 None of the requested parameters were detected in the sample submitted for analysis.

DK 12534 None of the requested parameters were detected in the sample submitted for analysis.

EPA 515.1 (Case Narrative)

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

CCC: Recoveries of acifluorfen and picloram in the fourth CCC at 2.0 µg/L were biased low outside the acceptance limits of 80-120% recovery.

MS/MSD: Recoveries of bentazon and picloram in the MS of sample DK 12526 were biased low outside the acceptance limits of 70-130% recovery due to matrix interference.

SS: The SS recovery for the LMB was biased low outside the acceptance limits of 70-130% recovery.

EPA 515.1 (Results Summary)

DK 12534 None of the requested parameters were detected in the sample submitted for analysis.

DK 12526 None of the requested parameters were detected in the sample submitted for analysis.

EPA 531.1 (Case Narrative)

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

EPA 531.1 (Results Summary)

DK 12526 None of the requested parameters were detected in the sample submitted for analysis.

DK 12534 None of the requested parameters were detected in the sample submitted for analysis.

EPA 353.2 (Case Narrative) (03/26/99B)

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

MS/MSD: Recoveries of nitrate-nitrite in the MS and MSD of sample DK 12272 were biased high outside the acceptance limits of 70-130% recovery due to matrix interference, but this compound was not detected in the sample submitted for analysis.

EPA 353.2 (Results Summary) (03/26/99B)

DK 12272 Nitrate-nitrite was not detected in the sample submitted for analysis.

EPA 353.2 (Case Narrative) (03/26/99A)

Analytical results were designated as reportable based on the associated quality control samples.

EPA 353.2 (Results Summary) (03/26/99A)

DK 12267 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12268 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12266 Nitrate-nitrite 1.2 mg/L

DK 12265 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12264 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12262 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12263 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12280 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12278 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12277 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12281 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12283 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12279 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12282 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12254 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12255 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12256 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12257 Nitrate-nitrite was not detected in the sample submitted for analysis.

Client: IDEM

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EPA 353.2 (Results Summary) (03/26/99A) - Cont'd

DK 12258 Nitrate-nitrite was not detected in the sample submitted for analysis.

DK 12259 Nitrate-nitrite was not detected in the sample submitted for analysis.

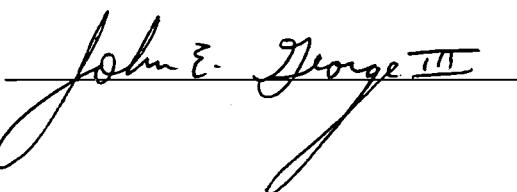
We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (219) 233-4777.

REVIEWED BY:



DATE: 8/27/99

FINALIZED BY:



DATE: 8/27/99



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ORDER # 39076

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CHAIN OF CUSTODY RECORD

PAGE ____ OF ____

CLIENT/COMPANY ORDERING (L.S.)

JDCM

STATE OR SAMPLING ORIGIN
IN

SAMPLE REQUESTED
RS

PWS ID#
RS

P.O.#

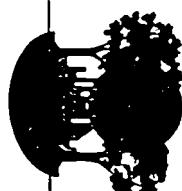
OF CONTAINERS

MATRIX CODE

TURNAROUND TIME

CUSTODY SEAL

EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS	DATE RECEIVED	PWS ID#	P.O.#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	CUSTODY SEAL
397519	3/13	AM	DK12254	525.2					1			
397520		AM		515.1 bottle broke in transit - Split w/535	500ml	5/31/			1			
397521		AM		2,4-D					2			
397523		AM		Carbofuran					2 Yrs			
397524		AM	DK12255	525.2					2 yrs			
397525		AM		515.1					1			
397526		AM		531.1					1			
397527		AM	Invalid	2,4-D					1			
397528		AM		Carbofuran					1			
397529		AM							1			
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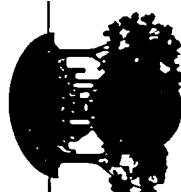
ORDER # _____

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CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	CUSTODY SEAL
EDL IDem		IN								
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS					
397559	3/13	AP	DK12264	525.2		1				
397560		AP	↓	515.1		2				
397561		AP	↓	531.1		1				
397562		AP	↓	2,4-D		1				
397563		AP	↓	Carbofuran		1				
397564	3/13	AP	DK12265	535.2		1				
397565		AP	↓	515.1		1				
397566		AP	↓	2,4-D		1				
397567		AP	↓	Carbofuran		1				
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397502		AP	↓							
397503		AP	↓							
397504		AP	↓							
397505		AP	↓							
397506		AP	↓							
397507		AP	↓							
397508		AP	↓							
397509		AP	↓							
397510		AP	↓							
397511		AP	↓							
397512		AP	↓							
397513		AP	↓							
397514		AP	↓							
397515		AP	↓							
397516		AP	↓							
397517		AP	↓							
397518		AP	↓							
397519		AP	↓							
397520		AP	↓							
397521		AP	↓							
397522		AP	↓							
397523		AP	↓							
397524		AP	↓							
397525		AP	↓							
397526		AP	↓							
397527		AP	↓							
397528		AP	↓							
397529		AP	↓							
397530		AP	↓							
397531		AP	↓							
397532		AP	↓							
397533	</									



Environmental Laboratories

1105 Hill Street : Scotts Ranch IN 46617 : Phone 1/219/233-4777 : 1800/333-4345

ORDER #

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

CLIENT/COMPANY ORDERING TEST

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS	
397569	3/13	NP	DK12266	525.2	1	1
397570		NP	Invalid	515.1	1	2
397571		AP		531.1		
397572		AP		2,4-D		
397573		AP		Carbofuran	1	1
397574		AP	DK12267	525.2	1	1
397575		AP	Invalid	515.1	1	2
397576		AP		531.1		
397577		AP		2,4-D		
397578	✓	AP		Carbofuran	1	1
		AP			# OF CONTAINERS	
		AP			MATRIX CODE	
		AP			TURNAROUND TIME	
		AP			CUSTODY SEAL	

FIELD COMMENTS

CARRIER

AIRBILL NO. _____

COLLEEN ING.—
BY ROBERT BROWN

1

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

Jn House Col

RELINQUISHED BY: (Signature)

DATE	TIME	LAB	COMMENTS
------	------	-----	----------

RElinquished by: (Signature)

ORY BY: DATE TIME

MATRIX CODES:

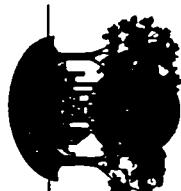
TURN-AROUND-TIME (TAT) - SURCHARGES

DW = DRINKING WATER
GW = GROUNDWATER
SW = SURFACE WATER
WW = INACTIVATED

SW = STANDARD (15 WORKING DAYS) WRITTEN
RV = RUSH (5 WORKING DAYS) VERBAL
RW = RUSH (5 WORKING DAYS) WRITTEN

0%	IV	= IMMEDIATE (12 HOURS) VERBAL
50%	IW	= IMMEDIATE (12 HOURS) WRITTEN
75%	SP	= WEEKEND/HOLIDAY

WILWATER


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ORDER #

 SHADED AREA FOR LAB USE ONLY **CHAIN OF CUSTODY RECORD** PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#	# OF CONTAINERS
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME			MATRIX CODE
397589	3/13	A/P	DK123468	535.2		1	
397589		A/P		535.1		1	
397589		A/P		2,4-D		1	
397589		A/P	DK12272-55	Carbofuran vial broke in transit - will split w/ 2,4-D	1		
		A/P		535.2			
		A/P		535.1			
		A/P		2,4-D			
		A/P		Carbofuran			
		A/P					
		A/P					

FIELD COMMENTS:

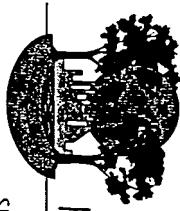
CARRIER _____

AIRBILL NO. _____

COOLER NO. _____ DATE SHIPPED _____

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	LAB COMMENTS
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY: <i>Sgt R. S. S.</i>	DATE	TIME	SHIPPING CONDITIONS: (Check One) <input checked="" type="checkbox"/> TEMPERATURE: _____ °C Lowest _____ °C Highest TURN-AROUND-TIME (TAT) - SURCHARGES IV = IMMEDIATE (12 HOURS) VERBAL 100% STAT = LESS THAN 48 HOURS IW = IMMEDIATE (72 HOURS) WRITTEN 125% Call SP = WEEKEND, HOLIDAY Samples received unannounced with less than 48 hours RW = REAGENT WATER holding time remaining may be subject to additional DW = DRINKING WATER surcharges. GW = GROUNDWATER SW = SURFACE WATER WW = WASTEWATER PW = POOLWATER



Environmental Health Laboratory

10

Health Laboratories

5 Hill Street : South Bend IN 46617 : Phone 219 333-7

33-4777 : 8001 333-4315 ORDER #

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 0

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS
397584	3/13	AP	DK 12372 - S	525.J		2
397585		AP	Invalid ms			2
397586		AP	insD			2
397587		AP	S	515.1		2
397588		AP	ms			2
397589		AP	msD			2
397590		AP	S	531.I		2
397591		AP	ms			2
397592		AP	msD			2
397593		AP	S	2,4-D		2
397594		AP	Invalid ms			2
397595		AP	i msD			2
397596		AP	S	Carboxyuran		2
FIELD COMMENTS:		CARRIER	AIRBILL NO.	COOLER NO.	DATE SHIPPED	MATRIX CODE
397597						TURNAROUND TIME
397598						CUSTODY SEAL

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENTS.

RELINQUISHED BY: (Signature)			RECEIVED BY: (Signature)			LAB COMMENTS		
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One)		
MATRIX CODES:			<i>Sgt-R-007</i>	3-17-99	0932	<input checked="" type="checkbox"/> Iced	<input type="checkbox"/> Ambient	
RW = REAGENT WATER DW = DRINKING WATER GW = GROUNDWATER SW = SURFACE WATER WW = WASTEWATER PW = POOL WATER	SW = STANDARD [15 WORKING DAYS] WRITTEN RV = RUSH [5 WORKING DAYS] VERBAL RW = RUSH [5 WORKING DAYS] WRITTEN	0% 50% 75%	IV = IMMEDIATE [12 HOURS] VERBAL IW = IMMEDIATE [12 HOURS] WRITTEN SP = WEEKEND/HOLIDAY	100% 125% Call	STAT = LESS THAN 48 HOURS Call Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges			
TURN-AROUND-TIME (TAT) - SURCHARGES								

SHADED AREA FOR LAB USE ONLY **CHAIN OF CUSTODY RECORD** PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	CUSTODY SEAL
IDEm		IN								
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME		SAMPLE REMARKS				
397609	3/14	AP	DK 12279		535.2		1			
397610		AP		Invalid	515.1		1			
397611		AP			531.1		2			
397612		AP			2,4-D		1			
397613		AP			Carbofuran		1			
		AP			535.2		1			
		AP			515.1		1			
		AP			531.1		2			
		AP			2,4-D		1			
		AP			Carbofuran		1			
		AP								
		AP								
		AP								

FIELD COMMENTS: CARRIER _____

AIRBILL NO. _____

COOLER NO. _____ DATE SHIPPED _____

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)

RECEIVED BY: (Signature)

DATE

TIME

RECEIVED BY: (Signature)

DATE

TIME

RECEIVED FOR LABORATORY BY:

DATE

TIME

SHIPPING CONDITIONS (Check One):

TEMPERATURE:

°C Lowest

°C Highest

LAB COMMENTS

STAT = LESS THAN 48 HOURS

Call

IV = IMMEDIATE (2 HOURS) VERBAL

100%

IW = IMMEDIATE (2 HOURS) WRITTEN

125%

SP = WEEKEND, HOLIDAY

Call

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.

MATRIX CODES:

RW

- REAGENT WATER

DW

- DRINKING WATER

GW

- GROUNDWATER

SW

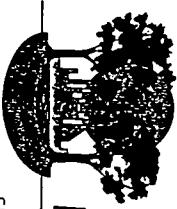
- SURFACE WATER

WW

- WASTEWATER

PW

- POOL WATER



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SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST			STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	CUSTODY SEAL
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #		TEST NAME			SAMPLE REMARKS			
397614	3/13		AP		DK 12280	S		525.2	2		
397615	AP		AP		Invalid ms	msd		515.1	2		
397616	AP		AP		S	msd		5	2		
397617	AP		AP		ms	msd		5	2		
397618	AP		AP		S	msd		5	2		
397619	AP		AP		531.1	msd		531.1	2		
397620	AP		AP		2,4-D	msd		2	2		
397621	AP		AP		2	msd		2	2		
397622	AP		AP		Card A furan	msd		2	2		
397623	AP		AP		2	msd		2	2		
397624	AP		AP		2	msd		2	2		
397625	AP		AP		2	msd		2	2		
397626	AP		AP		2	msd		2	2		
FIELD COMMENTS:	CARRIER		AIRBILL NO.		AIRBILL NO.	COOLER NO.		COOLER NO.	DATE SHIPPED		
397627	AP		AP		Invalid ms	msd		msd	2		
397628	AP		AP		In House loc	msd		msd	2		

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)

RECEIVED BY: (Signature)

LAB COMMENTS

RELINQUISHED BY: (Signature)

RECEIVED FOR LABORATORY BY:

SHIPPING CONDITIONS: (Check One)

TEMPERATURE: °C Lowest °C Highest

STAT = LESS THAN 48 HOURS

Call

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.

MATRIX CODES:

RW = REAGENT WATER
DW = DRINKING WATER
GW = GROUNDWATER
SW = SURFACE WATER
WW = WASTEWATER
PW = POOL WATER

SW = STANDARD (15 WORKING DAYS) WRITTEN
RV = RUSH (5 WORKING DAYS) VERBAL
RW = RUSH (5 WORKING DAYS) WRITTEN
SP = WEEKEND, HOLIDAY

0% IV = IMMEDIATE (72 HOURS) VERBAL
50% IW = IMMEDIATE (72 HOURS) WRITTEN
75% I25% °C Ambient
Call °C Highest

1-6 °C Receipt



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PAGE _____ OF _____

CHAIN OF CUSTODY RECORD

SHADED AREA FOR LAB USE ONLY

CLIENT/COMPANY ORDERING TEST

IDCM

STATE OF SAMPLE ORIGIN

IN

SAMPLER (Signature)

PWSID#

PO#

OF CONTAINERS

MATRIX CODE

TURNAROUND TIME

CUSTODY SEAL

EHL LAB#	COLLECTION		SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS	MATRIX CODE
	DATE	TIME					
397629	3/14	4P	DK 12281	- S	525,2	2	
397630		4P		Invalid ms			
397631		4P		insD			
397632		4P		.S		2	
397633		4P		ms			
397634		4P		msD			
397635		4P		S			
397636		4P		ms			
397637		4P		msD			
397638		4P					
397639		4P		S			
397640		4P		ms			
397641		4P		S			
FIELD COMMENTS:		CARRIER		AIRBILL NO. Invald ms	COOLER NO.		DATE SHIPPED
397642		Invald ms					
397643		Invald msD					
LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.							
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	LAB COMMENTS	
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One)	
						<input checked="" type="checkbox"/> Iced	<input type="checkbox"/> Ambient
						TEMPERATURE: °C Lowest	°C Highest
TURN-AROUND-TIME (TAT) - SURCHARGES							
MATRIX CODES:	RW = REAGENT WATER DW = DRINKING WATER GW = GROUNDWATER SW = SURFACE WATER WW = WASTEWATER PW = POOL WATER	SW = STANDARD (15 WORKING DAYS) WRITTEN RV = RUSH (5 WORKING DAYS) VERBAL RW = RUSH (5 WORKING DAYS) WRITTEN SP = WEEKEND, HOLIDAY Call	0% 50% 75%	IV = IMMEDIATE (1/2 HOURS) VERBAL IW = IMMEDIATE (1/2 HOURS) WRITTEN SP = WEEKEND, HOLIDAY Call	100% 125% 175%	STAT = LESS THAN 48 HOURS Iced Ambient 1-6 °C Receipt	Samples received unannounced will be less than 48 hours holding time remaining may be subject to additional surcharges.

J M House Col



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ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST
IDem

STATE OF SAMPLE ORIGIN
IN

SAMPLER (Signature)
JM House Col

PWS ID#
PO#
OF CONTAINERS
MATRIX CODE
TURNAROUND TIME
CUSTODY SEAL

EHL LAB#	COLLECTION DATE	SAMPLING SITE/LAB ID # TIME	TEST NAME	SAMPLE REMARKS
397644	3/15/95	AP	DK 12282	535.2
397645	3/14	AP	↓	Invalid
397646		AP	↓	531.1
397647		AP	↓	2,4-D
397648		AP	↓	Carbofuran
397649		AP	DK 12283	535.2
397650		AP	↓	Invalid
397651		AP	↓	531.1
397652		AP	↓	2,4-D
397653		AP	↓	Carbofuran
		AP	↓	
		AP	↓	
		AP	↓	

FIELD COMMENTS: CARRIER _____

AIRBILL NO. _____

COOLER NO. _____ DATE SHIPPED _____

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	LAB COMMENTS

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One)	LAB COMMENTS
						<input checked="" type="checkbox"/> Iced	<input type="checkbox"/> Ambient

SHIPPING TEMPERATURE: _____ °C Lowest _____ °C Highest _____

STAT = LESS THAN 48 HOURS

IMMEDIATE (12 HOURS) VERBAL

IMMEDIATE (72 HOURS) WRITTEN

Call

IV = IMMEDIATE (12 HOURS) WRITTEN

100%

STAT = LESS THAN 48 HOURS

IMMEDIATE (12 HOURS) WRITTEN

125%

IMMEDIATE (72 HOURS) WRITTEN

Call

IW = IMMEDIATE (72 HOURS) WRITTEN

50%

IMMEDIATE (12 HOURS) WRITTEN

125%

IMMEDIATE (72 HOURS) WRITTEN

Call

SP = WEEKEND/HOLIDAY

75%

IMMEDIATE (12 HOURS) WRITTEN

100%

IMMEDIATE (12 HOURS) WRITTEN

Call

RW = REAGENT WATER

DRINKING WATER

GROUNDWATER

SURFACE WATER

WASTEWATER

RUSH (5 WORKING DAYS) WRITTEN

Call

DW = DRINKING WATER

GW = GROUNDWATER

SW = SURFACE WATER

WW = WASTEWATER

RW = RUSH (5 WORKING DAYS) WRITTEN

Call

PW = POOLWATER

SP = POOLWATER

RW = POOLWATER

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SP = POOLWATER

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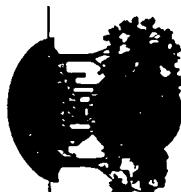
SP = POOLWATER

Call

SP = POOLWATER

RW = POOLWATER

Call


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ORDER # _____

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

SHADED AREA FOR LAB USE ONLY

 CLIENT/COMPANY ORDERING TEST
IDem

 STATE OF SAMPLE ORIGIN
IN

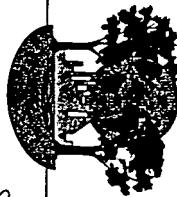
SAMPLER (Signature)

PWS ID#

PO#

 # OF CONTAINERS
 MATRIX CODE
 TURNAROUND TIME
 CUSTODY SEAL

EHL LAB#	COLLECTION		SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS
	DATE	TIME			
397654	3/12	1428	AVP	DK 12352	525.2
397655	1		AVP		515.1
397656			AVP		531.1
397657			AVP		2,4-D
397658			AVP		Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
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					2,4-D
					Carbofuran
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					515.1
					2,4-D
					Carbofuran
					525.2
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					2,4-D
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					515.1
					2,4-D
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					515.1
					2,4-D
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					525.2
					515.1
					2,4-D
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					525.2
					515.1
					2,4-D
					Carbofuran
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					515.1
					2,4-D
					Carbofuran
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					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
					515.1
					2,4-D
					Carbofuran
					525.2
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Environmental
Health Laboratory

1

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST

IDEM

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CONTAINERS
CODE

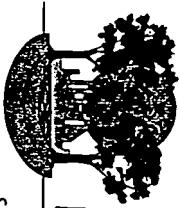
UND TIN
DY SEA.

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER(Signature)	PWS ID#	PO#
ID#		IN		MY		
EHL LAB#	COLLECTION DATE	SAMPLING SITE/LAB ID # TIME	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS	MATRIX CODE
397659	3/13	1240 AP	DK 12536	S	1	1
397660				ms	1	
397661				msd	1	
397662				S	1	
397663				ms	1	
397664				msd	1	
397665				S	1	
397666				ms	1	
397667				msd	1	
397668				S	1	
397669				ms	1	2,4-D
397670				msd	1	
397671				S	1	Carob/Flour
FIELD COMMENTS: 397672 397673	CARRIER ↓	AIRBILL NO. ms msd	COOLER NO. ↓	DATE SHIPPED Jn House Col ↓		

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	LAB COMMENTS
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One)
<i>Sgt Sgt</i>	3-17-99	0932				<input checked="" type="checkbox"/> Iced <input type="checkbox"/> Ambient
						TEMPERATURE: _____ °C Lowest _____ °C Highest 1-6 °C Receipt

DW	= DRINKING WATER
GW	= GROUNDWATER
SW	= SURFACE WATER
WW	= WASTEWATER
PW	= POOL WATER
SW	= STANDARD (15 WORKING DAYS) WRITTEN
RV	= RUSH (5 WORKING DAYS) VERBAL
RW	= RUSH (5 WORKING DAYS) WRITTEN
IV	= IMMEDIATE (24 HOURS) VERBAL
IW	= IMMEDIATE (72 HOURS) WRITTEN
SP	= WEEKEND, HOLIDAY
100%	STAT = LESS THAN 48 HOURS
125%	Call
	Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.



Environmental Health Laboratory

1105 Hill Street: South Bend IN 46617: Phone (219) 233-4777: 1800 1 333 1215

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENTS

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	LAB COMMENTS
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One)
<i>J. G. Rector</i>	3/17/99	0930				<input checked="" type="checkbox"/> Iced <input type="checkbox"/> Ambient
						°C Lowest °C Highest 1-6 °C Receipt

DW = DRINKING WATER
 GW = GROUNDWATER
 SW = SURFACE WATER
 WW = WASTEWATER
 PW = POOL WATER

SW = STANDARD (15 WORKING DAYS) WRITTEN
 RV = RUSH (5 WORKING DAYS) VERBAL
 nW = RUSH (5 WORKING DAYS) WRITTEN

RITTEN	0%	IV = IMMEDIATE (12 HOURS) WRITING	100
50%	IW = IMMEDIATE (12 HOURS)	125	
75%	SP = WEEKEND/HOLIDAY		Call

STAT = LESS THAN 48 HOURS **Call**
Samples received unanswered within less than 48 hours
holding time (remaining may be subject to additional
charges).

**Environmental
Health Laboratories** 110 S. Hill Street • South Bend, IN 46617 • Phone (219) 233-4777 • (800) 332-4345

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST

IDEn

STATE OF SAMPLE ORIGIN

SAMPLER (Signature)

PWS ID#

PO#

OF CONTAINERS

MATRIX CODE

TURNAROUND TIME

CUSTODY SEAL

EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS
397694	3/13	4P	DK 12372	5	N03 - 353.2	
397695		4P		MSD		
397696		4P		67		
397697		4P		68		
397698		4P		65		
397699		4P		64		
397700		4P		63		
397701		4P		62		
397702		4P		80		
397703		4P		5		
397704		4P				
397705		4P		INVALID MS		
397706		4P		MSD		

FIELD COMMENTS:

CARRIER

AIRBILL NO.

COOLER NO.

DATE SHIPPED

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	LAB COMMENTS
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One) <input checked="" type="checkbox"/> Iced <input type="checkbox"/> Ambient TEMPERATURE: _____ °C Lowest _____ °C Highest _____ °C Receipt

TURN-AROUND-TIME (TAT) - SURCHARGES

MATRIX CODES:	RW = REAGENT WATER	IV = IMMEDIATE [72 HOURS] VERBAL	100% STAT = LESS THAN 48 HOURS
DW = DRINKING WATER	IW = IMMEDIATE [72 HOURS] WRITTEN	100%	Call
GW = GROUNDWATER	RW = RUSH [5 WORKING DAYS] WRITTEN	125%	Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.
SW = SURFACE WATER	SP = WEEKEND, HOLIDAY	75%	Call
WW = WASTEWATER		75%	
PW = POOL WATER			



INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

1

QWM

1

OSHW M

1

OER

QAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: March 16, 1979

Section:

Signature:

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT	COMMENTS
RELINQUISHED BY: <i>Rajesh Singh</i>	March 16 99 AM/PM	Y N	NO 1-L bottles received for DK 12256 SS 322-9
RECEIVED BY: <i>S S Aggarwal 3-17-99 0930</i>	/ / AM/PM	Y N	
RELINQUISHED BY:	/ / AM/PM	Y N	
RECEIVED BY:	/ / AM/PM	Y N	
RELINQUISHED BY:	/ / AM/PM	Y N	
RECEIVED BY:	/ / AM/PM	Y N	
RELINQUISHED BY:	/ / AM/PM	Y N	
RECEIVED BY:	/ / AM/PM	Y N	
RELINQUISHED BY:	/ / AM/PM	Y N	
RECEIVED BY:	/ / AM/PM	Y N	

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature:

8

Address:

Date: / - / Time: : A



Nitrite
INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT



OWM



OSHWM



OER



OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: _____ / _____ / _____

Section: _____

Signature: _____

</div



INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

QWYM

OSHWM

OER

OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: March 15, 1999

Section:

I certify that I received the above sample(s).

CARRIERS

Should samples be fixed?

Y Z

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: Rajesh Singh	03/15/99 AM/PM	Y	N	40C CLIENT PROVIDED SAMPLE NUMBER
RECEIVED BY:	3/17/99 09:00 AM/PM	Y	N	
RELINQUISHED BY: Mindy Short	/ / AM/PM	Y	N	
RECEIVED BY:	/ / AM/PM	Y	N	
RELINQUISHED BY:	/ / AM/PM	Y	N	
RECEIVED BY:	/ / AM/PM	Y	N	
RELINQUISHED BY:	/ / AM/PM	Y	N	
RECEIVED BY:				

LAB CUSTODIAN

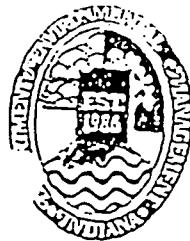
I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature:

Date: ____ / ____ / ____ Time: ____ : ____ A

Signature:

Address:



INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

To EhL -1-



OWM



OSHWM



OER



OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Signature: Lamela Oregon

Date: 3 / 15 / 00

Section: Ground water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	CONSISTING OF THE INDICATED NUMBER OF BOTTLES										DATE AND TIME COLLECTED						
		2000 ml	P.N.M.	1000 ml	P.N.M.	1000 ml	G.N.M.	500 ml	G.W.M.	40 ml	VIAL	120 ml	G.(B.O.)	500 ml	P.N.M.	250 ml	P.N.M.	
logged in 3/8	DK12340																	3/11/99 17:23 AM/PM
	DK12342																	3/11/99 16:39 AM/PM
↓	DK12344																	3/11/99 12:52 AM/PM
logged in 3/8	DK12345																	3/11/99 13:41 AM/PM
	DK12346																	3/11/99 15:56 AM/PM
	DK12347																	3/11/99 15:13 AM/PM
	DK12348																	3/11/99 14:28 AM/PM
	DK12349																	3/11/99 18:35 AM/PM
↓	DK12350																	3/12/99 13:02 AM/PM
✓	DK12352																	3/12/99 14:28 AM/PM
logged in 3/8	DK12353																	3/12/99 15:06 AM/PM
↓	DK12355																	3/12/99 15:52 AM/PM

P - Plastic

G - Glass

N.M. - Narrow Mouth

W.M. - Wide Mouth

B.O. - Bacti. Only

I certify that I received the above sample(s).

CARRIERS

Should samples be iced?

Y	N
---	---

SIGNATURE	DATE AND TIME	SEALS INTACT	COMMENTS
RELINQUISHED BY: <u>Lamela Oregon</u>	3/15/99 13:30	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____

Lab: _____

Date: ____ / ____ / ____ Time: ____ : ____ AM

Addres...:



Accler 1 CT INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

10 Eh L
cont.
- - 2 -

OWM OSHWM OER OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 3/15/99

Section: Groundwater

Signature: Pamela Dugan

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	CONSISTING OF THE INDICATED NUMBER OF BOTTLES										DATE AND TIME COLLECTED
		2000 ml P, N. M.	1000 ml P, N. M.	1000 ml G, N. M.	500 ml G, W. M.	40 ml VIAL	120 ml G, (B.O.)	500 ml P, N.M.	250 ml P, N.M.			
logged 3/18	DK12356✓			2	4							3/12/99 16:41 AM/PM
	DK12357✓			2	4							3/12/99 18:21 AM/PM
	DK12358✓			2	4							3/12/99 17:40 AM/PM
↓	DK12359✓			2	4							3/13/99 12:31 AM/PM
↓	DK12354✓			2	4							3/13/99 11:02 AM/PM
'org/din 3/18	DK12530✓			2	4							3/13/99 13:07 AM/PM
	DK12531✓			2	4							3/13/99 16:59 AM/PM
↓	DK12532✓			2	4							3/13/99 15:43 AM/PM
✓	DK12533			6	12							3/13/99 14:06 AM/PM
logged 3/18	DK12534✓			2	4							3/13/99 14:46 AM/PM
SS												1 / : AM/PM
												1 / : AM/PM

P - Plastic

G - Glass

N.M. - Narrow Mouth

W.M. - Wide Mouth

B.O. - Bacti. Only

CARRIERS

Should samples be iced?

Y N

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT	COMMENTS
RELINQUISHED BY: <u>Pamela Dugan</u>	3/15/99	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	
RELINQUISHED BY:	/ /	Y	
RECEIVED BY:	: AM/PM	N	

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ Date: ____ / ____ / ____ Time: ____ : ____ AM/PM

Lab: _____ Address: _____



**INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION**

ASSIGNED LAB: EHL

DK12530 - DK12534
DK12346, DK12342

Date Submitted:		Sample Nos Submitted Today:	DK 12344 to DK 12350 BLK 12352 - DK 12359
Project:	MONITORING NETWORK	Assigned IDEM Sample Nos:	[REDACTED]
Matrix:	Ground Water	Sampler:	[REDACTED]

TASKS &/OR PARAMETERS TO DETERMINE

APPROXIMATE CONCENTRATIONS: 10ppm

REPORTING TIME REQUIRED: 30 DAYS

Comments:

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015



INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

OWM

OSHWM

OER

OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 3, 15, 9

Signature: *Michael Gandy*

Section:

P - Plastic

G - Glass

N.M. - Narrow Mouth

W.M. Wide Mouth

3.0 Best Case

I certify that I received the above sample(s).

CARRIERS

Should samples be lead?

Y	N
---	---

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: <i>Mitch Yeng</i>	3 / 15 / 99	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ **Date:** _____ **Time:** _____ **AM/PM:** _____

Lab: 4.1 4.2 4.3 4.4



**INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION**

ASSIGNED LAB: EHL

Date Submitted:	3/15/99	Sample Nos Submitted Today:	DK 12523 to DK 12526
Project:	MONITORING NETWORK	Assigned IDEM Sample Nos:	DK to DK
Matrix:	Ground Water	Sampler:	

TASKS &/OR PARAMETERS TO DETERMINE

APPROXIMATE CONCENTRATIONS: 10ppm

REPORTING TIME REQUIRED: 30 DAYS

Comments:

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015

ENVIRONMENTAL HEALTH LABORATORIES

Page 1 of 2

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
 Run Date: 03/25/99 Run Time: 08:15
 LOT #: Standard 1: not used

Standard 2: 8G1215
 Standard 3: not used
 Control Solution: 8G1213
 Diluent/Zero Solution: 8G1015

Analyst: N. Myers
 Project(s): IDEM
 Enzyme Conjugate: 8G1071
 Stoping Solution: 8E1259
 Washing Solution: 8F1245
 Color Solution: 8G1016
 Magnetic Particles: 8G1070

Instrument ID: B&L Spectronic 21
 Run ID #: 18046
 Standard Warmup Time: _____
 Spectronic 21 Setting: 450
 Curve Date: 01/28/99
 Kit Lot: 8G1240
 in use: 03/25/99

Seq Num	LabID#	Client	Sample Description	Sample Type	Absorbance(450nm)	Ex/BD	Calcd. Result	Final Result	% Rec.
1			Diluent/Zero	0.0 ug/mL	LMB	RW	1.379		
2			Diluent/Zero	0.0 ug/mL	LMB	RW	1.306		
3			Standard 2 (1/10 diln)	1.0 ug/mL	ICS	RW	1.062	79.1	< 1.0
4			Standard 2 (1/10 diln)	1.0 ug/mL	ICS	RW	1.054	78.5	< 1.0
5			Control	3.5 ug/mL	QCS	RW	0.802	59.7	5.0
6	397522	IDEM	DK12254	FS	GW	1.385	103.2	< 1.0	Absent
7	397527	IDEM	DK12255	FS	GW	1.482	110.4	< 1.0	Absent
8	397537	IDEM	DK12257	FS	GW	1.520	113.2	< 1.0	Absent
9	397542	IDEM	DK12258	FS	GW	1.412	105.2	< 1.0	Absent
10	397547	IDEM	DK12259	FS	GW	1.465	109.1	< 1.0	Absent
11	397552	IDEM	DK12262	FS	GW	1.379	102.7	< 1.0	Absent
12	397557	IDEM	DK12263	FS	GW	1.359	101.2	< 1.0	Absent
13	397562	IDEM	DK12264	FS	GW	1.363	101.5	< 1.0	Absent
14	397567	IDEM	DK12265	FS	GW	1.423	106.0	< 1.0	Absent
15	397572	IDEM	DK12266	FS	GW	1.411	105.1	< 1.0	Absent
16			Diluent/Zero	0.0 ug/mL	LMB	RW	1.232	91.8	< 1.0
17			Standard 2 (1/10 diln)	1.0 ug/mL	ICS	RW	1.061	79.0	< 1.0
18	397577	IDEM	DK12267	FS	GW	1.436	107.0	< 1.0	Absent
19	397582	IDEM	DK12268	FS	GW	1.345	100.2	< 1.0	Absent
20	397593	IDEM	DK12272	FS	GW	1.356	101.0	< 1.0	Absent
21	397602	IDEM	DK12277	FS	GW	1.286	95.8	< 1.0	Absent
22	397607	IDEM	DK12278	FS	GW	1.315	98.0	< 1.0	Absent

Comments: _____

ENVIRONMENTAL HEALTH LABORATORIES

Page 2 of 2

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Run Date: 03/25/99 **Run Time:** 08:15
LOT #

Standard 1: not used
 Standard 2: 8G1215
 Standard 3: not used
 Control Solution: 8G1213
 Diluent/Zero Solution: 8G1015

Analyst: N. Myers
Project(s): IDEM
Enzyme Conjugate: 8G1071
Stopping Solution: 8E1259
Washing Solution: 8F1245
Color Solution: 8G1016
Magnetic Particles: 8G1070

Instrument ID: B&L Spectronic 21
Ryu ID #: 18046
Standard Warmup Time:
Spectronic 21 Setting: 450
Curve Date: 01/28/99
Kit Lot : 8G1240
in use : 03/25/99

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm)	B3400 / B2600	Cited.	Final Result	% Reg	Q
23	397612	IDEM	DK12279	FS	GW	1.296	96.5	<1.0	Absent		
24	397623	IDEM	DK12280	FS	GW	1.346	100.3	<1.0	Absent		
25	397638	IDEM	DK12281	FS	GW	1.339	99.7	<1.0	Absent		
26	397647	IDEM	DK12282	FS	GW	1.316	98.0	<1.0	Absent		
27	397652	IDEM	DK12283	FS	GW	1.371	102.1	<1.0	Absent		
28	397657	IDEM	DK12352	FS	GW	1.275	95.0	<1.0	Absent		
29		Diluent/Zero	0.0 ug/L	LMB	RW	1.271	94.7	<1.0	Absent		
30		Standard 2 (1/10 diln)	1.0 ug/L	ICS	RW	1.007	75.0	1.6	Present	160	
31	397668	IDEM	DK12526	FS	GW	1.346	100.3	<1.0	Absent		
32	397669	IDEM	DK12526 MS at 7.0 ug/L	MS	GW	0.677	50.4	10.0	Present	143	
33	397670	IDEM	DK12526 MSD at 7.0 ug/L	MSD	GW	0.684	50.9	9.5	Present	136	
34	397683	IDEM	DK12533	FS	GW	1.331	99.1	<1.0	Absent		
35	397692	IDEM	DK12534	FS	GW	1.372	102.2	<1.0	Absent		
36		Diluent/Zero	0.0 ug/L	LMB	RW	1.272	94.7	<1.0	Absent		
37		Standard 2 (1/10 diln)	1.0 ug/L	ICS	RW	1.044	77.8	1.3	Present	130	
38		Control	3.5 ug/L	QCS	RW	0.815	60.7	4.6	Present	131	
39											
40											
41											
42											
43											
44											

Comments: _____

ENVIRONMENTAL HEALTH LABORATORIES

Page 1 of 2

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
 Run Date: 03/31/99 Run Time: 15:00
 LOT # Standard 1: not used
 Standard 2: 8J0190a
 Standard 3: 8J0191a
 Control Solution: 8J0192a
 Diluent/Zero Solution: 8F1161

Analyst: N. Myers
 Project(s): IDEM
 Enzyme Conjugate: 8K0076
 Stopping Solution: 8H1191
 Washing Solution: 8F1245
 Color Solution: 8H1077
 Magnetic Particles: 8K0075

Instrument ID: B&L Spectronic 21
 Run ID #: 18051
 Standard Warmup Time:
 Spectronic 21 Setting: 450
 Curve Date: 03/29/99
 Kit Lot : 8K0085
 in use : 03/30/99

Seq Num	LabID#	Client	Sample Description	Sample Type	Absorbance (nm) BX	BK X100 Bo	Calcd. IPPB	Final Result	% Rec.	Q
1			Diluent/Zero	0.0 ug/L	LMB RW	1.770				
2			Standard2	1.0 ug/L	ICS RW	0.875	48.1	0.85	Present	85
3			Standard2	1.0 ug/L	ICS RW	0.888	48.8	0.80	Present	80
4			Control	2.0 ug/L	QCS RW	0.730	40.1	1.3	Present	65
5			DK12254		FS GW	1.730	95.1	<1.0	Absent	
6	397523	IDEM	DK12255		FS GW	1.810	99.5	<1.0	Absent	
7	397528	IDEM	DK12257		FS GW	1.810	99.5	<1.0	Absent	
8	397528	IDEM	DK12258		FS GW	1.890	103.8	<1.0	Absent	
9	397543	IDEM	DK12259		FS GW	1.760	96.7	<1.0	Absent	
10	397548	IDEM	DK12262		FS GW	1.720	94.5	<1.0	Absent	
11	397553	IDEM	DK12263		FS GW	1.860	102.2	<1.0	Absent	
12	397558	IDEM	DK12264		FS GW	1.820	100.0	<1.0	Absent	
13	397563	IDEM	DK12265		FS GW	1.720	94.5	<1.0	Absent	
14	397568	IDEM	DK12266		FS GW	1.850	101.6	<1.0	Absent	
15	397573	IDEM	Standard2	1.0 ug/L	LMB RW	1.790	98.4	<1.0	Absent	
16			Diluent/Zero	0.0 ug/L	ICS RW	0.857	47.1	0.88	Present	88
17			Standard2	1.0 ug/L	ICS RW	0.857	47.1	0.88	Present	88
18	397578	IDEM	DK12267		FS GW	1.750	96.2	<1.0	Absent	
19	397583	IDEM	DK12268		FS GW	1.750	96.2	<1.0	Absent	
20	397596	IDEM	DK12272		FS GW	1.810	99.5	<1.0	Absent	
21	397603	IDEM	DK12277		FS GW	1.860	102.2	<1.0	Absent	
22	397608	IDEM	DK12278		FS GW	1.800	98.9	<1.0	Absent	

Comments: _____

ENVIRONMENTAL HEALTH LABORATORIES

Page 2 of 2

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
 Run Date: 03/31/99 Run Time: 15:00
 LOT # Standard 1: not used
 Standard 2: 8J0190a
 Standard 3: 8J0191a
 Control Solution: 8J0192a
 Diluent/Zero Solution: 8F1161

Analyst: N. Myers
 Project(s): IDEM
 Enzyme Conjugate: 8K0076
 Stopping Solution: 8H1191
 Washing Solution: 8F1245
 Color Solution: 8H1077
 Magnetic Particles: 8K0075

Instrument ID: B&L Spectronic 21
 Run ID #: 18051
 Standard Warmup Time:
 Spectronic 21 Setting: 450
 Curve Date: 03/29/99
 Kit Lot: 8K0085
 in use : 03/30/99

Seq Num	Lab ID#	Client	Sample Description	Sample Type	Matrix	Absorbance (nm)	Bx x 100	Calcd. PPB	Final Results	% Rec	Q
23	397613	IDEM	DK12279	FS	GW	1.930	106.0	< 1.0	Absent		
24	397626	IDEM	DK12280	FS	GW	1.760	96.7	< 1.0	Absent		
25	397641	IDEM	DK12281	FS	GW	1.780	97.8	< 1.0	Absent		
26	397648	IDEM	DK12282	FS	GW	1.780	97.8	< 1.0	Absent		
27	397653	IDEM	DK12283	FS	GW	1.800	98.9	< 1.0	Absent		
28		Diluent/Zero	0.0 ug/L	LMB	RW	1.700	93.4	< 1.0	Absent		
29		Standard2	1.0 ug/L	ICS	RW	0.866	47.6	0.85	Present	85	
30	397658	IDEM	DK12352	FS	GW	1.820	100.0	< 1.0	Absent		
31	397671	IDEM	DK12526	FS	GW	1.750	96.2	< 1.0	Absent		
32	397672	IDEM	DK12526 MS at 2.0 ug/L	MS	GW	0.675	37.1	1.6	Present	80	
33	397673	IDEM	DK12526 MSD at 2.0 ug/L	MSD	GW	0.716	39.3	1.4	Present	70	
34	397686	IDEM	DK12533	FS	GW	1.760	96.7	< 1.0	Absent		
35	397693	IDEM	DK12534	FS	GW	1.740	95.6	< 1.0	Absent		
36		Diluent/Zero	0.0 ug/L	LMB	RW	1.630	89.6	< 1.0	Absent		
37		Standard2	1.0 ug/L	ICS	RW	0.884	48.6	0.80	Present	80	
38		Control	2.0 ug/L	QCS	RW	0.618	34.0	2.0	Present	100	
39											
40											
41											
42											
43											
44											

Comments: _____

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING
AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A040299A
Contract: BAA 97-044 Task: 4A Data Directory: AE\040299A
Project: IDEM - Pesticide Network Case: n/a Initial Cali File: 0305G0AE
Column: Restek XTI-5 30m x 0.25mm ID Method: 525.2 Instrument ID: GC/MS - AE

m/e	Ion/Abundance Criteria	% Rel Abundance	Q		Matrix	Code
51	10 to 80% of base peak	25.32		Tune Date:	Reagent Water	RW
68	< 2% of Mass 69	0.00			Surface Water	SW
70	< 2% of Mass 69	0.00			Drinking Water	DW
127	10 to 80% of base peak	25.37			Ground Water	GW
197	< 2% of Mass 198	0.00		Tune Time:	Waste Water	WW
198	base peak or > 50 % of mass 442	100.00			Sediment	SE
199	5 to 9% of mass 198	7.02			Soil	SO
275	10 to 60% of base peak	18.40		Hours Since	Sludge	SL
365	> 1% of base peak	4.23		Last Tune	Other Solvents	OS
441	Present and < mass 443	14.27			TCLP Leachate	TC
442	base peak or > 50 % of mass 198	71.07			Hazardous Waste	HW
443	15 to 24% of mass 442	19.47			Contamination Levels: L=Low M=Medium H=High	
	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix	Contm. Level
1	Tune 1	TI-DFN1	04/02/99	13:13	OS	
2	SPCC	S-525A	04/02/99	13:30	OS	
3	Continuing Calibration Check A	C-1-18A	04/02/99	14:12	OS	
4	Laboratory Method Blank A	MB-525A	04/02/99	15:09	RW	
5	Laboratory Fortified Blank A	FB-525A	04/02/99	15:44	RW	
6	DK 12254	397519	04/02/99	16:20	GW	L
7	DK 12255	397524	04/02/99	16:55	GW	L
8	DK 12257	397534	04/02/99	17:30	GW	L
9	DK 12258	397539	04/02/99	18:05	GW	L
10	DK 12259	397544	04/02/99	18:40	GW	L
11	DK 12262	397549	04/02/99	19:16	GW	L
12	DK 12263	397554	04/02/99	19:51	GW	L
13	DK 12264	397559	04/02/99	20:26	GW	L
14	DK 12265	397564	04/02/99	21:01	GW	L
15	DK 12266	397569	04/02/99	21:36	GW	L
16	DK 12267	397574	04/02/99	22:11	GW	L
17	DK 12268	397579	04/02/99	22:46	GW	L
18	DK 12272	397584	04/02/99	23:21	GW	L
19	Continuing Calibration Check B	C-1-18B	04/03/99	00:19	OS	
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Acq. File: A040299A
Contract: BAA 97-044	Task: 4A	Data Directory: AE\040299A
Project: IDEM - Pesticide Network	Case: n/a	Initial Cali File: 0305G0AE
Column: Restek XTI-5 30m x 0.25mm ID	Method: 525.2	Instrument ID: GC/MS - AE
Data File: S-525A		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	0.97	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	0.89	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10%	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10%	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-1-18A
Acquisition File: A040299A
Data Directory: 040299A
Today's Date: 1999/08/16
Instrument: GC/MS - AE
Extracted Date: Not Available
Sample Number: 399963

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 14:12
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Description: CCC A

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	IS-Pyrene-d10	5.0	ug/L	100.0	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
34256-82-1	Acetochlor	1.0	0.838	ug/L	83.8	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.812	ug/L	81.2	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	0.827	ug/L	82.7	70.0	130.0	PASS
314-40-9	Bromacil	1.0	1.212	ug/L	121.2	70.0	130.0	PASS
21725-46-2	Cyanazine	1.0	0.9	ug/L	90.0	70.0	130.0	PASS
333-41-5	Diazinon	1.0	0.897	ug/L	89.7	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.872	ug/L	87.2	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.828	ug/L	82.8	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.858	ug/L	85.8	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	1.327	ug/L	132.7	70.0	130.0	*FAIL*
51218-45-2	Metolachlor	1.0	0.793	ug/L	79.3	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.889	ug/L	88.9	70.0	130.0	PASS
40487-42-1	Pendimethalin	1.0	0.906	ug/L	90.6	70.0	130.0	PASS
1610-18-0	Prometon	1.0	0.941	ug/L	94.1	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.845	ug/L	84.5	70.0	130.0	PASS
122-34-9	Simazine	1.0	1.211	ug/L	121.1	70.0	130.0	PASS
13071-79-9	Terbufos	1.0	0.828	ug/L	82.8	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.89	ug/L	89.0	70.0	130.0	PASS

Environmental Health Laboratories
Laboratory Method Blank Check

File Name: MB-525A
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 399964
Sample Location: Not Available
Sample Description: LMB A L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 15:09
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.449	ug/L	81.26	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.449	ug/L	99.53	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.158	ug/L	94.21	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	102.82	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.612	ug/L	102.50	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Laboratory Fortified Blank Check

File Name: FB-525A
Acquisition File: A040299A
Data Directory: 040299A
Today's Date: 1999/08/16
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 399965

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 15:44
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Description: LFB A L

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.37	ug/L	82.61	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.87	ug/L	110.96	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.777	ug/L	90.30	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	125.94	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.002	ug/L	94.56	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	
34256-82-1	Acetochlor	1.0	0.907	ug/L	90.7	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.935	ug/L	93.5	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	0.976	ug/L	97.6	70.0	130.0	PASS
314-40-9	Bromacil	1.0	1.507	ug/L	150.7	70.0	130.0	*FAIL*
21725-46-2	Cyanazine	1.0	1.035	ug/L	103.5	70.0	130.0	PASS
333-41-5	Diazinon	1.0	1.01	ug/L	101.0	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.837	ug/L	83.7	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.849	ug/L	84.9	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.899	ug/L	89.9	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	1.054	ug/L	105.4	70.0	130.0	PASS
51218-45-2	Metolachlor	1.0	0.903	ug/L	90.3	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.9	ug/L	90.0	70.0	130.0	PASS
40487-42-1	Pendimethalin	1.0	1.024	ug/L	102.4	70.0	130.0	PASS
1610-18-0	Prometon	1.0	0.934	ug/L	93.4	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.961	ug/L	96.1	70.0	130.0	PASS
122-34-9	Simazine	1.0	1.377	ug/L	137.7	70.0	130.0	*FAIL*
13071-79-9	Terbufos	1.0	0.734	ug/L	73.4	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.974	ug/L	97.4	70.0	130.0	PASS

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397519
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397519
Sample Location: Not Available
Sample Description: IDEM DK12254 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 16:20
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	7.809	ug/L	84.97	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	9.368	ug/L	101.94	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	8.612	ug/L	93.71	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	91.17	70.0	130.0
115-86-6	SS-Triphenylphosphate	9.509	ug/L	103.47	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.2	ug/L
15972-60-8	Alachlor	<	0.2	ug/L
1912-24-9	Atrazine	<	0.2	ug/L
314-40-9	Bromacil	<	0.2	ug/L
21725-46-2	Cyanazine	<	0.2	ug/L
333-41-5	Diazinon	<	0.2	ug/L
959-98-8	Endosulfan I	<	0.2	ug/L
33213-65-9	Endosulfan II	<	0.2	ug/L
1031-07-8	Endosulfan sulfate	<	0.2	ug/L
22224-92-6	Fenamiphos	<	0.2	ug/L
51218-45-2	Metolachlor	<	0.2	ug/L
21087-64-9	Metribuzin	<	0.2	ug/L
40487-42-1	Pendimethalin	<	0.2	ug/L
1610-18-0	Prometon	<	0.2	ug/L
1918-16-7	Propachlor	<	0.2	ug/L
122-34-9	Simazine	<	0.14	ug/L
13071-79-9	Terbufos	<	0.2	ug/L
1582-09-8	Trifluralin	<	0.2	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397524
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397524
Sample Location: Not Available
Sample Description: IDEM DK12255

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 16:55
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.435	ug/L	88.79	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.996	ug/L	100.02	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.68	ug/L	93.69	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	110.18	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.822	ug/L	96.54	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397534	Method: 525.2
Acquisition File: A040299A	Calibration File: 0305G0AE
Data Directory: 040299A	Analysis Date: 1999/04/02
Instrument: GC/MS - AE	Analysis Time: 17:30
Extracted Date: 1999/03/25	Analyst: toms
Sample Number: 397534	Results Submitted By: toms
Sample Location: Not Available	Run Number: 18384
Sample Description: IDEM DK12257 L	

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.285	ug/L	86.04	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.829	ug/L	96.97	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.5	ug/L	90.36	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	116.13	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.988	ug/L	100.16	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397539
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397539
Sample Location: Not Available
Sample Description: IDEM DK12258 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 18:05
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.424	ug/L	86.15	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.124	ug/L	99.79	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.932	ug/L	96.05	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	96.06	70.0	130.0
115-86-6	SS-Triphenylphosphate	23.052	ug/L	448.92	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397544
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397544
Sample Location: Not Available
Sample Description: IDEM DK12259 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 18:40
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.519	ug/L	94.05	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.777	ug/L	99.42	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.488	ug/L	93.40	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	109.67	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.818	ug/L	100.27	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397549
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397549
Sample Location: Not Available
Sample Description: IDEM DK12262 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 19:16
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.178	ug/L	86.32	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.925	ug/L	101.76	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.699	ug/L	97.09	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	103.82	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.135	ug/L	106.10	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397554
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397554
Sample Location: Not Available
Sample Description: IDEM DK12263 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 19:51
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.181	ug/L	87.01	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.801	ug/L	99.92	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.38	ug/L	91.16	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	120.27	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.653	ug/L	96.84	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397559
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397559
Sample Location: Not Available
Sample Description: IDEM DK12264 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 20:26
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.305	ug/L	87.95	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.043	ug/L	103.02	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.569	ug/L	93.34	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	101.34	70.0	130.0
115-86-6	SS-Triphenylphosphate	8.312	ug/L	169.81	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397564
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397564
Sample Location: Not Available
Sample Description: IDEM DK12265 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 21:01
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.404	ug/L	89.15	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.115	ug/L	103.54	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.732	ug/L	95.79	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	109.53	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.845	ug/L	98.08	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397569
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397569
Sample Location: Not Available
Sample Description: IDEM DK12266 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 21:36
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.238	ug/L	86.67	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.018	ug/L	102.62	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.66	ug/L	95.30	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	91.59	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.75	ug/L	97.14	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397574	Method: 525.2
Acquisition File: A040299A	Calibration File: 0305G0AE
Data Directory: 040299A	Analysis Date: 1999/04/02
Instrument: GC/MS - AE	Analysis Time: 22:11
Extracted Date: 1999/03/25	Analyst: toms
Sample Number: 397574	Results Submitted By: toms
Sample Location: Not Available	Run Number: 18384
Sample Description: IDEM DK12267 L	

Sample Quality Control

CAS No.	Parameter	Limits				
		Amount	Units	%Rec	Lower	Upper
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.35	ug/L	88.06	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.977	ug/L	100.75	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.683	ug/L	94.80	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	105.59	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.898	ug/L	99.15	70.0	130.0

Ordered Parameter Results

CAS No.	Parameter	Amount	MRL	Units
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397579
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397579
Sample Location: Not Available
Sample Description: IDEM DK12268 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 22:46
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.439	ug/L	91.53	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.011	ug/L	103.32	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.54	ug/L	93.61	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	103.66	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.052	ug/L	104.16	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397584
Acquisition File: A040299A
Data Directory: 040299A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397584
Sample Location: Not Available
Sample Description: IDEM DK12272 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/02
Analysis Time: 23:21
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.172	ug/L	85.23	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.813	ug/L	98.32	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.55	ug/L	92.95	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	107.90	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.888	ug/L	99.86	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-1-18B
Acquisition File: A040299A
Data Directory: 040299A
Today's Date: 1999/08/16
Instrument: GC/MS - AE
Extracted Date: Not Available
Sample Number: 399966

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 00:19
Analyst: toms
Results Submitted By: toms
Run Number: 18384

Sample Description: CCC B

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	IS-Pyrene-d10	5.0	ug/L	95.94	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
34256-82-1	Acetochlor	1.0	0.86	ug/L	86.0	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.818	ug/L	81.8	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	0.86	ug/L	86.0	70.0	130.0	PASS
314-40-9	Bromacil	1.0	0.894	ug/L	89.4	70.0	130.0	PASS
21725-46-2	Cyanazine	1.0	0.911	ug/L	91.1	70.0	130.0	PASS
333-41-5	Diazinon	1.0	0.916	ug/L	91.6	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.824	ug/L	82.4	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.846	ug/L	84.6	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.793	ug/L	79.3	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	1.198	ug/L	119.8	70.0	130.0	PASS
51218-45-2	Metolachlor	1.0	0.81	ug/L	81.0	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.874	ug/L	87.4	70.0	130.0	PASS
40487-42-1	Pendimethalin	1.0	0.94	ug/L	94.0	70.0	130.0	PASS
1610-18-0	Prometon	1.0	0.849	ug/L	84.9	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.876	ug/L	87.6	70.0	130.0	PASS
122-34-9	Simazine	1.0	1.313	ug/L	131.3	70.0	130.0	*FAIL*
13071-79-9	Terbufos	1.0	0.875	ug/L	87.5	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.881	ug/L	88.1	70.0	130.0	PASS

08/16/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

	IS1 Area	IS1 RT
CCC Standard	2089641	16.6168
CCC Upper Limit	2716533	N/A
CCC Lower Limit	1462748.7	N/A
Init Call Lower Limit	N/A	N/A

Sample No.	Filename	IS1 Area	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1. 399964 / LMB	MB-525A	2148495	16.615	102.82	RW			
2. 399965 / LFB	FB-525A	2631764	16.6168	125.94	RW			
3. 397519 / FS	397519	1905056	16.6333	91.17	GW			
4. 397524 / FS	397524	2302413	16.6324	110.18	GW			
5. 397534 / FS	397534	2426676	16.6333	116.13	GW			
6. 397539 / FS	397539	2007303	16.6314	96.06	GW			
7. 397544 / FS	397544	2291612	16.6324	109.67	GW			
8. 397549 / FS	397549	2169453	16.6653	103.82	GW			
9. 397554 / FS	397554	2513132	16.6983	120.27	GW			
10. 397559 / FS	397559	2117655	16.7157	101.34	GW			
11. 397564 / FS	397564	2288772	16.7157	109.53	GW			
12. 397569 / FS	397569	1913855	16.7166	91.59	GW			
13. 397574 / FS	397574	2206517	16.7166	105.59	GW			
14. 397579 / FS	397579	2166183	16.7166	103.66	GW			
15. 397584 / FS	397584	2254827	16.734	107.90	GW			
16. 399966 / CCC	C-1-18B	2004723	16.7147	95.94	OS			

IS1 = IS-Pyrene-d10
Q = Out of Range

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Surrogate Percent Recovery**

		Upper Limit	Lower Limit	SS1	SS2	SS3	SS4												
Sample No. / Desc	Filename	SS1	Target %Rec	Q	SS2	Target %Rec	Q	SS3	Target %Rec	Q	SS4	Target %Rec	Q	SS4	Target %Rec	Q	Tot Matrix		
1. 399964 / LMB	MB-525A	4.449	5.0	81.26	5.449	5.0	99.53	5.158	5.0	94.21	5.612	5.0	102.50	0	RW				
2. 399965 / LFB	FB-525A	4.37	5.0	82.61	5.87	5.0	110.96	4.777	5.0	90.30	5.002	5.0	94.56	0	RW				
3. 397519 / FS	397519	7.809	5.0	84.97	9.368	5.0	101.94	8.612	5.0	93.71	9.509	5.0	103.47	0	GW				
4. 397524 / FS	397524	4.435	5.0	88.79	4.996	5.0	100.02	4.68	5.0	93.69	4.822	5.0	96.54	0	GW				
5. 397534 / FS	397534	4.285	5.0	86.04	4.829	5.0	96.97	4.5	5.0	90.36	4.988	5.0	100.16	0	GW				
6. 397539 / FS	397539	4.424	5.0	86.15	5.124	5.0	99.79	4.932	5.0	96.05	23.052	5.0	448.92	Q	1	GW			
7. 397544 / FS	397544	4.519	5.0	94.05	4.777	5.0	99.42	4.488	5.0	93.40	4.818	5.0	100.27	0	GW				
8. 397549 / FS	397549	4.178	5.0	86.32	4.925	5.0	101.76	4.699	5.0	97.09	5.135	5.0	106.10	0	GW				
9. 397554 / FS	397554	4.181	5.0	87.01	4.801	5.0	99.92	4.38	5.0	91.16	4.653	5.0	96.84	0	GW				
10. 397559 / FS	397559	4.305	5.0	87.95	5.043	5.0	103.02	4.569	5.0	93.34	8.312	5.0	169.81	Q	1	GW			
11. 397564 / FS	397564	4.404	5.0	89.15	5.115	5.0	103.54	4.732	5.0	95.79	4.845	5.0	98.08	0	GW				
12. 397569 / FS	397569	4.238	5.0	86.67	5.018	5.0	102.62	4.66	5.0	95.30	4.75	5.0	97.14	0	GW				
13. 397574 / FS	397574	4.35	5.0	88.06	4.977	5.0	100.75	4.683	5.0	94.80	4.898	5.0	99.15	0	GW				
14. 397579 / FS	397579	4.439	5.0	91.53	5.011	5.0	103.32	4.54	5.0	93.61	5.052	5.0	104.16	0	GW				
15. 397584 / FS	397584	4.172	5.0	85.23	4.813	5.0	98.32	4.55	5.0	92.95	4.888	5.0	99.86	0	GW				

SS1 = SS-2,4,5,6-Tetrachloro-m-xylene

SS2 = SS-4,4'-Dichlorobiphenyl

SS3 = SS-Pentachloronitrobenzene

SS4 = SS-Triphenylphosphate

Q = Out of Range

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INITIAL CALIBRATION**

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A032299A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\032299A
Project:	IDEML - Pesticide Network	Case:	n/a	Initial Cali File:	0305G0AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A					
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	% RSD	Corr Coeff	Q	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	
Acetochlor	0.203	0.214	0.256	0.310	0.311	0.318	0.323	0.315	----	----	0.292	14.2	1.0000	*	
Alachlor	0.793	0.957	1.084	1.189	1.263	1.291	1.318	1.238	----	----	1.191	10.8	1.0000		
Atrazine	0.259	0.284	0.379	0.438	0.454	0.454	0.441	----	----	----	0.408	16.5	1.0000		
Bromacil	0.211	0.212	0.198	0.351	0.488	0.759	0.825	0.894	----	----	0.532	55.1	0.9990	*	
Cyanazine	0.133	0.161	0.164	0.262	0.297	0.346	0.373	0.405	----	----	0.287	33.8	0.9990	*	
Diazinon	0.819	0.999	0.940	1.054	1.091	1.004	0.976	----	----	----	1.011	5.4	1.0000		
Endosulfan I	0.255	0.247	0.247	0.250	0.280	0.272	0.295	0.286	----	----	0.268	7.4	1.0000		
Endosulfan II	0.290	0.277	0.256	0.259	0.318	0.319	0.321	0.323	----	----	0.296	10.4	1.0000		
Endosulfan sulfate	0.224	0.220	0.208	0.215	0.243	0.249	0.268	0.281	----	----	0.241	11.4	1.0000		
Fenamiphos	0.121	0.136	0.149	0.239	0.341	0.618	0.718	0.819	----	----	0.430	66.1	0.9980	*	
Metolachlor	1.796	2.018	2.274	2.610	2.866	2.845	2.868	2.505	----	----	2.569	12.8	0.9980		
Metribuzin	0.330	0.292	0.403	0.486	0.576	0.629	0.654	0.670	----	----	0.530	26.9	1.0000		
Pendimethalin	0.240	0.240	0.329	0.442	0.514	0.570	0.592	0.600	----	----	0.470	29.8	1.0000		
Prometon	0.476	0.610	0.755	0.914	1.007	0.993	0.962	----	----	----	0.850	18.5	1.0000		
Propachlor	0.472	0.583	0.606	0.704	0.778	0.782	0.770	0.692	----	----	0.702	11.7	0.9990		
Simazine	0.048	0.058	0.062	0.136	0.178	0.240	0.255	0.259	----	----	0.170	51.2	1.0000	*	
Terbufos	0.994	1.093	1.116	1.269	1.358	1.397	1.463	1.428	----	----	1.303	11.4	1.0000		
Trifluralin	0.711	0.835	0.816	0.942	1.029	1.101	1.212	1.149	----	----	1.012	15.2	1.0000		

Avg RF = Average response factor

Max %RSD = 30% for a linear fit

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Lab Name: Environmental Health Laboratories
 Contact: n/a
 Project: Routine MDL
 Column: Restek XTI-5 30m x 0.25mm ID
 Matrix Code: RW

Lab ID:	unknown	Acq. File:	A032598A
Task:	n/a	Data Directory:	AE\032598A
Case :	n/a	Initial Cali Data:	0220F0AE
Method:	525.2C	Instrument ID:	GC/MS - AE

Method	CAS#	Parameter	Target	Observed Recovery							Std.	Calb.	MDL	Units
				Rep=1	Rep=2	Rep=3	Rep=4	Rep=5	Rep=6	Rep=7				
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.078	0.025	ug/L	
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.041	0.013	ug/L	
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.044	0.014	ug/L	
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.068	0.021	ug/L	
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.073	0.023	ug/L	
525.2	333-41-5	Diazinon	0.1	0.289	0.278	0.283	0.286	0.282	0.265	0.252	0.0133	0.042	ug/L	
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.075	0.024	ug/L	
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L	
525.2	1031-07-8	Endosulfan Sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L	
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.071	0.022	ug/L	
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.031	0.010	ug/L		
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.029	0.009	ug/L	
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.035	0.011	ug/L	
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L	
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.070	0.022	ug/L		
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.085	0.027	ug/L	
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.0135	0.042	ug/L		
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.054	0.017	ug/L	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments _____

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING
AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A040399A
Contract: BAA 97-044 Task: 4A Data Directory: AE040399A
Project: IDEM - Pesticide Network Case: n/a Initial Cali File: 0305G0AE
Column: Restek XTI-5 30m x 0.25mm ID Method: 525.2 Instrument ID: GC/MS - AE

m/e	Ion Abundance Criteria	% Rel Abundance	Q	Matrix	Code	
51	10 to 80% of base peak	26.22		Reagent Water	RW	
68	< 2% of Mass 69	0.00		Surface Water	SW	
70	< 2% of Mass 69	0.00		Drinking Water	DW	
127	10 to 80% of base peak	27.35		Ground Water	GW	
197	< 2% of Mass 198	0.00		Waste Water	WW	
198	base peak or > 50 % of mass 442	100.00		Sediment	SE	
199	5 to 9% of mass 198	6.85		Soil	SO	
275	10 to 60% of base peak	23.57		Sludge	SL	
365	> 1% of base peak	4.53		Other Solvents	OS	
441	Present and < mass 443	16.06		TCLP Leachate	TC	
442	base peak or > 50 % of mass 198	82.95		Hazardous Waste	HW	
443	15 to 24% of mass 442	18.85		Contamination Levels: L=Low M=Medium H=High		
	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code Contm. Level	
1	Tune 1	TI-DFN1	04/03/99	12:23	OS	
2	SPCC	S-525A	04/03/99	12:52	OS	
3	Continuing Calibration Check A	C-1-18A	04/03/99	13:33	OS	
4	Laboratory Method Blank A	MB-525A	04/03/99	14:32	RW	
5	Laboratory Fortified Blank A	FB-525A	04/03/99	15:07	RW	
6	DK 12277	397599	04/03/99	15:42	GW	L
7	DK 12278	397604	04/03/99	16:17	GW	L
8	DK 12279	397609	04/03/99	16:53	GW	L
9	DK 12280	397614	04/03/99	17:47	GW	L
10	DK 12281	397629	04/03/99	18:22	GW	L
11	DK 12282	397644	04/03/99	18:57	GW	L
12	DK 12283	397649	04/03/99	19:32	GW	L
13	DK 12352	397654	04/03/99	20:07	GW	L
14	DK 12526	397659	04/03/99	20:42	GW	L
15	DK 12526 Matrix Spike	397660-S	04/03/99	21:17	GW	
16	DK 12526 Matrix Spike Duplicate	397661SD	04/03/99	21:52	GW	
17	DK 12533	397674	04/03/99	22:27	GW	L
18	DK 12534	397689	04/03/99	23:02	GW	L
19	Continuing Calibration Check B	C-1-18B	04/04/99	00:00	OS	
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Acq. File: A040399A
Contract: BAA 97-044	Task: 4A	Data Directory: AE\040399A
Project: IDEM - Pesticide Network	Case: n/a	Initial Cali File: 0305G0AE
Column: Restek XTI-5 30m x 0.25mm ID	Method: 525.2	Instrument ID: GC/MS - AE
Data File: S-525A		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	0.92	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	0.89	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10%	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10%	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

Environmental Health Laboratories
Continuing Calibration Check Check

File Name: C-1-18A
Acquisition File: A040399A
Data Directory: 040399A
Today's Date: 1999/08/23
Instrument: GC/MS - AE
Extracted Date: Not Available
Sample Number: 399967

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 13:33
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Description: CCC A

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	IS-Pyrene-d10	5.0	ug/L	100.0	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
34256-82-1	Acetochlor	1.0	0.842	ug/L	84.2	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.816	ug/L	81.6	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	0.822	ug/L	82.2	70.0	130.0	PASS
314-40-9	Bromacil	1.0	1.193	ug/L	119.3	70.0	130.0	PASS
21725-46-2	Cyanazine	1.0	0.911	ug/L	91.1	70.0	130.0	PASS
333-41-5	Diazinon	1.0	0.937	ug/L	93.7	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.799	ug/L	79.9	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.794	ug/L	79.4	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.801	ug/L	80.1	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	1.348	ug/L	134.8	70.0	130.0	*FAIL*
51218-45-2	Metolachlor	1.0	0.781	ug/L	78.1	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.901	ug/L	90.1	70.0	130.0	PASS
40487-42-1	Pendimethalin	1.0	0.889	ug/L	88.9	70.0	130.0	PASS
1610-18-0	Prometon	1.0	0.898	ug/L	89.8	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.843	ug/L	84.3	70.0	130.0	PASS
122-34-9	Simazine	1.0	1.228	ug/L	122.8	70.0	130.0	PASS
13071-79-9	Terbufos	1.0	0.825	ug/L	82.5	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.884	ug/L	88.4	70.0	130.0	PASS

Environmental Health Laboratories
Laboratory Method Blank Check

File Name: MB-525A
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 399968
Sample Location: Not Available
Sample Description: LMB A L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 14:32
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.341	ug/L	79.29	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.353	ug/L	97.77	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.938	ug/L	90.19	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	101.41	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.373	ug/L	98.14	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Laboratory Fortified Blank Check

File Name: FB-525A
Acquisition File: A040399A
Data Directory: 040399A
Today's Date: 1999/08/23
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 399969

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 15:07
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Description: LFB A L

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.195	ug/L	79.30	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.879	ug/L	111.13	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.911	ug/L	92.84	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	124.85	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.926	ug/L	93.12	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	
34256-82-1	Acetochlor	1.0	0.923	ug/L	92.3	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.913	ug/L	91.3	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	0.946	ug/L	94.6	70.0	130.0	PASS
314-40-9	Bromacil	1.0	1.407	ug/L	140.7	70.0	130.0	*FAIL*
21725-46-2	Cyanazine	1.0	1.024	ug/L	102.4	70.0	130.0	PASS
333-41-5	Diazinon	1.0	0.978	ug/L	97.8	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.843	ug/L	84.3	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.826	ug/L	82.6	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.867	ug/L	86.7	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	1.08	ug/L	108.0	70.0	130.0	PASS
51218-45-2	Metolachlor	1.0	0.89	ug/L	89.0	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.906	ug/L	90.6	70.0	130.0	PASS
40487-42-1	Pendimethalin	1.0	1.002	ug/L	100.2	70.0	130.0	PASS
1610-18-0	Prometon	1.0	1.0	ug/L	100.0	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.954	ug/L	95.4	70.0	130.0	PASS
122-34-9	Simazine	1.0	1.371	ug/L	137.1	70.0	130.0	*FAIL*
13071-79-9	Terbufos	1.0	0.706	ug/L	70.6	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.921	ug/L	92.1	70.0	130.0	PASS

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397599
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397599
Sample Location: Not Available
Sample Description: IDEM DK12277 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 15:42
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.632	ug/L	95.21	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.763	ug/L	97.90	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.581	ug/L	94.16	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	123.21	70.0	130.0
115-86-6	SS-Triphenylphosphate	6.255	ug/L	128.57	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397604
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397604
Sample Location: Not Available
Sample Description: IDEM DK12278 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 16:17
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.1	ug/L	84.62	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.94	ug/L	101.96	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.441	ug/L	91.66	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	115.89	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.451	ug/L	91.87	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397609
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397609
Sample Location: Not Available
Sample Description: IDEM DK12279 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 16:53
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.054	ug/L	83.33	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.974	ug/L	102.24	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.223	ug/L	86.80	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	107.23	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.105	ug/L	104.93	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397614
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397614
Sample Location: Not Available
Sample Description: IDEM DK12280 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 17:47
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	3.75	ug/L	76.69	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.131	ug/L	104.93	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.628	ug/L	94.64	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	103.33	70.0	130.0
115-86-6	SS-Triphenylphosphate	13.302	ug/L	272.02	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397629
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397629
Sample Location: Not Available
Sample Description: IDEM DK12281 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 18:22
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.417	ug/L	89.32	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.067	ug/L	102.47	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.634	ug/L	93.71	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	119.25	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.663	ug/L	94.30	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397644
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397644
Sample Location: Not Available
Sample Description: IDEM DK12282 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 18:57
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.227	ug/L	85.05	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.955	ug/L	99.70	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.556	ug/L	91.67	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	105.89	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.889	ug/L	118.49	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397649 **Method:** 525.2
Acquisition File: A040399A **Calibration File:** 0305G0AE
Data Directory: 040399A **Analysis Date:** 1999/04/03
Instrument: GC/MS - AE **Analysis Time:** 19:32
Extracted Date: 1999/03/25 **Analyst:** toms
Sample Number: 397649 **Results Submitted By:** toms
Sample Location: Not Available **Run Number:** 18427
Sample Description: IDEM DK12283 L

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.198	ug/L	85.67	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.041	ug/L	102.88	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.61	ug/L	94.08	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	110.96	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.242	ug/L	106.98	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397654
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397654
Sample Location: Not Available
Sample Description: IDEM DK12352 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 20:07
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.113	ug/L	82.92	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.052	ug/L	101.85	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.549	ug/L	91.71	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	112.33	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.943	ug/L	99.66	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397659	Method: 525.2
Acquisition File: A040399A	Calibration File: 0305G0AE
Data Directory: 040399A	Analysis Date: 1999/04/03
Instrument: GC/MS - AE	Analysis Time: 20:42
Extracted Date: 1999/03/25	Analyst: toms
Sample Number: 397659	Results Submitted By: toms
Sample Location: Not Available	Run Number: 18427
Sample Description: IDEM DK12526 L	

Sample Quality Control

CAS No.	Parameter	Limits				
		Amount	Units	%Rec	Lower	Upper
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	3.894	ug/L	79.63	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.0	ug/L	102.25	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.473	ug/L	91.47	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	115.47	70.0	130.0
115-86-6	SS-Triphenylphosphate	6.045	ug/L	123.62	70.0	130.0

Ordered Parameter Results

CAS No.	Parameter	Amount	MRL	Units
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Environmental Health Laboratories
 Contract: BAA 97-044
 Project: IDEM - Pesticide Network
 Column: Restek XTI-5 30m x 0.25mm ID
 Sample Number/Description: 397659 / IDEM DK12526

Lab ID: na
 Task: 4A
 Case: na
 Method: 525.2
 Matrix: GW
 Acq. File: A040399A
 Data Directory: 040399A
 Initial Cali File: 0305G0AE
 Instrument ID: GC/MS - AE
 MS Data File: 397660-S
 MSD Data File: 397661SD

Compound	Spike Added	Sample Conc	MS Conc	MS % Rec	MS Limits	MSD Conc	MSD % Rec	MSD Limits	% Recovery	MSD Q	MSD RPD	MSD Limits	MSD Q	RPD	RPD Limits	RPD Q
Acetochlor	1.0	NF	0.877	87.7	70 - 130	0.833	83.3	70 - 130	5.1	20%						
Alachlor	1.0	NF	0.851	85.1	70 - 130	0.835	83.5	70 - 130	1.9	20%						
Atrazine	1.0	NF	0.890	89.0	70 - 130	0.901	90.1	70 - 130	1.2	20%						
Bromacil	1.0	NF	1.401	140.1	70 - 130	*	1.436	143.6	70 - 130	*	2.5	20%				
Cyanazine	1.0	NF	0.943	94.3	70 - 130	0.963	96.3	70 - 130	2.1	20%						
Diazinon	1.0	NF	0.889	88.9	4 - 146	0.869	86.9	4 - 146	2.3	20%	*					
Endosulfan I	1.0	NF	0.921	92.1	70 - 130	1.052	105.2	70 - 130	13.3	20%						
Endosulfan II	1.0	NF	0.930	93.0	70 - 130	1.174	117.4	70 - 130	23.2	20%	*					
Endosulfan sulfate	1.0	NF	0.968	96.8	70 - 130	1.238	123.8	70 - 130	24.5	20%	*					
Fenamiphos	1.0	NF	1.651	165.1	70 - 130	*	2.281	228.1	70 - 130	*	32.0	20%	*			
Metolachlor	1.0	NF	0.829	82.9	70 - 130	0.839	83.9	70 - 130	1.2	20%						
Metrubuzin	1.0	NF	0.909	90.9	58 - 112	0.884	88.4	58 - 112	2.8	20%						
Pendimethalin	1.0	NF	0.945	94.5	70 - 130	0.937	93.7	70 - 130	0.9	20%						
Prometon	1.0	NF	0.893	89.3	70 - 130	0.931	93.1	70 - 130	4.2	20%						
Propachlor	1.0	NF	0.888	88.8	70 - 130	0.907	90.7	70 - 130	2.1	20%						
Simazine	1.0	NF	1.229	122.9	59 - 128	1.227	122.7	59 - 128	0.2	20%						
Tebutios	1.0	NF	0.873	87.3	70 - 130	0.875	87.5	70 - 130	0.2	20%						
Trifluralin	1.0	NF	0.888	88.8	70 - 130	0.891	89.1	70 - 130	0.3	20%						

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

NF = Not Found

% Rec = % Recovery = (MS Conc - Sample Conc) x 100 / Spike Added

RPD = Relative Percent Difference = abs(MS Conc - MSD Conc) x 100 / (MS Conc + MSD Conc) / 2

Comments: _____

Environmental Health Laboratories

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397674
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397674
Sample Location: Not Available
Sample Description: IDEM DK12533 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 22:27
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

CAS No.	Parameter	Amount	Units	Limits		
				%Rec	Lower	Upper
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.149	ug/L	84.07	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.84	ug/L	98.07	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.431	ug/L	89.79	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	106.99	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.061	ug/L	102.55	70.0	130.0

Ordered Parameter Results

CAS No.	Parameter	Amount	MRL	Units
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

Environmental Health Laboratories
Sample Result Record Sheet

File Name: 397689
Acquisition File: A040399A
Data Directory: 040399A
Instrument: GC/MS - AE
Extracted Date: 1999/03/25
Sample Number: 397689
Sample Location: Not Available
Sample Description: IDEM DK12534 L

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/03
Analysis Time: 23:02
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.052	ug/L	82.69	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.915	ug/L	100.31	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.411	ug/L	90.02	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	125.24	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.783	ug/L	118.02	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-1-18B
Acquisition File: A040399A
Data Directory: 040399A
Today's Date: 1999/08/23
Instrument: GC/MS - AE
Extracted Date: Not Available
Sample Number: 399970

Method: 525.2
Calibration File: 0305G0AE
Analysis Date: 1999/04/04
Analysis Time: 00:00
Analyst: toms
Results Submitted By: toms
Run Number: 18427

Sample Description: CCC B

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	IS-Pyrene-d10	5.0	ug/L	104.19	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
34256-82-1	Acetochlor	1.0	0.827	ug/L	82.7	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.843	ug/L	84.3	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	0.873	ug/L	87.3	70.0	130.0	PASS
314-40-9	Bromacil	1.0	1.104	ug/L	110.4	70.0	130.0	PASS
21725-46-2	Cyanazine	1.0	0.9	ug/L	90.0	70.0	130.0	PASS
333-41-5	Diazinon	1.0	0.942	ug/L	94.2	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.824	ug/L	82.4	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.808	ug/L	80.8	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.758	ug/L	75.8	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	1.243	ug/L	124.3	70.0	130.0	PASS
51218-45-2	Metolachlor	1.0	0.811	ug/L	81.1	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.892	ug/L	89.2	70.0	130.0	PASS
40487-42-1	Pendimethalin	1.0	0.887	ug/L	88.7	70.0	130.0	PASS
1610-18-0	Prometon	1.0	0.965	ug/L	96.5	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.84	ug/L	84.0	70.0	130.0	PASS
122-34-9	Simazine	1.0	1.191	ug/L	119.1	70.0	130.0	PASS
13071-79-9	Terbufos	1.0	0.868	ug/L	86.8	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.894	ug/L	89.4	70.0	130.0	PASS

08/23/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

Sample No.	Filename	IS1 Area	IS1 RT	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1. 399968 / LMB	MB-525A	2223036	16.6653	101.41	101.41	RW			
2. 399969 / LFB	FB-525A	2736903	16.6653	124.85	124.85	RW			
3. 397599 / FS	397599	2701008	16.6653	123.21	123.21	GW			
4. 397604 / FS	397604	2540512	16.6653	115.89	115.89	GW			
5. 397609 / FS	397609	2350716	16.6653	107.23	107.23	GW			
6. 397614 / FS	397614	2265238	16.6827	103.33	103.33	GW			
7. 397629 / FS	397629	2614278	16.6818	119.25	119.25	GW			
8. 397644 / FS	397644	2321402	16.6671	105.89	105.89	GW			
9. 397649 / FS	397649	2432541	16.6662	110.96	110.96	GW			
10. 397654 / FS	397654	2462489	16.6662	112.33	112.33	GW			
11. 397659 / FS	397659	2531329	16.6671	115.47	115.47	GW			
12. 397660 / MS	397660-S	2419382	16.6653	110.36	110.36	GW			
13. 397661 / MSD	397661SD	2456959	16.6653	112.08	112.08	GW			
14. 397674 / FS	397674	2345355	16.6671	106.99	106.99	GW			
15. 397689 / FS	397689	2745456	16.6662	125.24	125.24	GW			
16. 399970 / CCC	C-1-18B	2284018	16.6671	104.19	104.19	OS			

IS1 = IS-Pyrene-d10
Q = Out of Range

Environmental Health Laboratories

Semi-Volatile Organic Chemicals

Surrogate Percent Recovery

SS1 = SS-2,4,5,6-Tetrachloro-m-xylene

332 = 33-4,4'-Dichlorobiphenyl

SS4 = SS-Triphenylphosphosphate

Q = Out of Range

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: IDEM - Pesticide Network
Column: Restek XTI-5 30m x 0.25mm ID

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2

Acq. File: A032299A
Data Directory: AE\032299A
Initial Cali File: 0305G0AE
Instrument ID: GC/MS - AE

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A	Avg	% RSD	Corr Coeff	Q
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Rf	Rf	Rf	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Q
Acetochlor	0.203	0.214	0.256	0.310	0.311	0.318	0.323	0.315	----	----	0.292	14.2	1.0000	
Alachlor	0.793	0.957	1.084	1.189	1.263	1.291	1.318	1.238	----	----	1.191	10.8	1.0000	
Atrazine	0.259	0.284	0.379	0.438	0.454	0.454	0.441	----	----	----	0.408	16.5	1.0000	
Bromacil	0.211	0.212	0.198	0.351	0.488	0.759	0.825	0.894	----	----	0.532	55.1	0.9990	*
Cyanazine	0.133	0.161	0.164	0.262	0.297	0.346	0.373	0.405	----	----	0.287	33.8	0.9990	*
Diazinon	0.819	0.999	0.940	1.054	1.091	1.004	0.976	----	----	----	1.011	5.4	1.0000	
Endosulfan I	0.255	0.247	0.247	0.250	0.280	0.272	0.295	0.286	----	----	0.268	7.4	1.0000	
Endosulfan II	0.290	0.277	0.256	0.259	0.318	0.319	0.321	0.323	----	----	0.296	10.4	1.0000	
Endosulfan sulfate	0.224	0.220	0.208	0.215	0.243	0.249	0.268	0.281	----	----	0.241	11.4	1.0000	
Fenamiphos	0.121	0.136	0.149	0.239	0.341	0.618	0.718	0.819	----	----	0.430	66.1	0.9980	*
Metolachlor	1.796	2.018	2.274	2.610	2.866	2.845	2.868	2.505	----	----	2.569	12.8	0.9980	
Metribuzin	0.330	0.292	0.403	0.486	0.576	0.629	0.654	0.670	----	----	0.530	26.9	1.0000	
Pendimethalin	0.240	0.240	0.329	0.442	0.514	0.570	0.592	0.600	----	----	0.470	29.8	1.0000	
Prometon	0.476	0.610	0.755	0.914	1.007	0.993	0.962	----	----	----	0.850	18.5	1.0000	
Propachlor	0.472	0.583	0.606	0.704	0.778	0.782	0.770	0.692	----	----	0.702	11.7	0.9990	
Simazine	0.048	0.058	0.062	0.136	0.178	0.240	0.255	0.259	----	----	0.170	51.2	1.0000	*
Terbufos	0.994	1.093	1.116	1.269	1.358	1.397	1.463	1.428	----	----	1.303	11.4	1.0000	
Trifluralin	0.711	0.835	0.816	0.942	1.029	1.101	1.212	1.149	----	----	1.012	15.2	1.0000	

Avg RF = Average response factor

Max %RSD = 30% for a linear fit

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A032598A
Contract:	n/a	Task:	n/a	Data Directory:	AE\032598A
Project:	Routine MDL	Case :	n/a	Initial Cali Data:	0220F0AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW				

Method	CAS #	Parameter	Observed Recovery							Std.	Calcd.	Units	
			Rep#1	Rep#2	Rep#3	Rep#4	Rep#5	Rep#6	Rep#7				
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	333-41-5	Diazinon	0.1	0.289	0.278	0.283	0.286	0.282	0.265	0.252	0.0133	0.042	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan Sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.0070	0.022	ug/L	
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments _____

**CHLORINATED ACID PESTICIDES - GC/MS TUNING
AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: N040299A
 Contract: BAA 97-044 Task: 4A Data Directory: N\040299A
 Project: IDEM - Pesticide Network Case: n/a Initial Cali File: 0326G0N
 Column: Restek XTI-5 30m x 0.25mm ID Method: 515.1 Instrument ID: GC/MS - N

m/e	Ion Abundance Criteria	% Rel Abundance	Q	Matrix	Code
51	10 to 80% of base peak	31.97		Reagent Water	RW
68	< 2% of Mass 69	0.00		Surface Water	SW
70	< 2% of Mass 69	0.00		Drinking Water	DW
127	10 to 80% of base peak	33.95		Ground Water	GW
197	< 2% of Mass 198	0.00		Waste Water	WW
198	base peak or > 50 % of mass 442	100.00		Sediment	SE
199	5 to 9% of mass 198	6.47		Soil	SO
275	10 to 60% of base peak	23.89		Sludge	SL
365	> 1% of base peak	3.78		Other Solvents	OS
441	Present and < mass 443	13.05		TCLP Leachate	TC
442	base peak or > 50 % of mass 198	77.07		Hazardous Waste	HW
443	15 to 24% of mass 442	18.20		Contamination Levels: L=Low M=Medium H=High	

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix	Contm.
1	Tune 1	TI-DFN1	04/02/99	18:13	OS	
2	SPCC	S-515A	04/02/99	18:30	OS	
3	Continuing Calibration Check A	C-2-06A	04/02/99	19:15	OS	
4	Continuing Calibration Check B	C-2-06B	04/02/99	19:38	OS	
5	Laboratory Method Blank A	MB-515A	04/02/99	20:22	RW	
6	Laboratory Fortified Blank A	FB-515A	04/02/99	20:45	RW	
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Q = A flag or qualifier indicating possible cause for an out of range reading

Comments:

**CHLORINATED ACID PESTICIDES
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Acq. File: N040299A
Contract: BAA 97-044	Task: 4A	Data Directory: N040299A
Project: IDEM - Pesticide Network	Case: n/a	Initial Cali File: 0326G0N
Column: Restek XTI-5 30m x 0.25mm ID	Method: 515.1	Instrument ID: GC/MS - N
Data File: S-515A		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Dinoseb	Sensitivity	0.05	Detection of analyte: S/N > 3	5.7	Pass	
4 - Nitrophenol	Chromatographic Performance	5.00	0.70 < PGF < 1.05 (a)	0.76	Pass	
4 - Nitrophenol	Column Performance	0.15				
3,5-Dichlorobenzoic acid		0.30	Resolution > 0.40 (b)	0.78	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-2-06A
Acquisition File: N040299A
Data Directory: 040299A
Today's Date: 1999/08/23
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400063

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/02
Analysis Time: 19:15
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Description: CCC A

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromoctafluorobiphenyl	5.0	ug/L	100.0	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	2.0	1.947	ug/L	97.35	80.0	120.0	PASS
94-82-6	2,4-DB	2.0	1.986	ug/L	99.3	80.0	120.0	PASS
50594-66-6	Acifluorfen	2.0	1.863	ug/L	93.15	80.0	120.0	PASS
25057-89-0	Bentazon	2.0	1.668	ug/L	83.4	80.0	120.0	PASS
1918-00-9	Dicamba	2.0	1.782	ug/L	89.1	80.0	120.0	PASS
94-74-6	MCPA	2.0	1.911	ug/L	95.55	80.0	120.0	PASS
7085-19-0	Mecoprop	2.0	2.136	ug/L	106.8	80.0	120.0	PASS
1918-02-1	Picloram	2.0	1.8	ug/L	90.0	80.0	120.0	PASS

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-2-06B
Acquisition File: N040299A
Data Directory: 040299A
Today's Date: 1999/08/23
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400064

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/02
Analysis Time: 19:38
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Description: CCC B

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromoocetafluorobiphenyl	5.0	ug/L	103.45	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	2.0	2.027	ug/L	101.35	80.0	120.0	PASS
94-82-6	2,4-DB	2.0	1.913	ug/L	95.65	80.0	120.0	PASS
50594-66-6	Acifluorfen	2.0	1.807	ug/L	90.35	80.0	120.0	PASS
25057-89-0	Bentazon	2.0	1.687	ug/L	84.35	80.0	120.0	PASS
1918-00-9	Dicamba	2.0	1.864	ug/L	93.2	80.0	120.0	PASS
94-74-6	MCPA	2.0	1.919	ug/L	95.95	80.0	120.0	PASS
7085-19-0	Mecoprop	2.0	1.883	ug/L	94.15	80.0	120.0	PASS
1918-02-1	Picloram	2.0	1.729	ug/L	86.45	80.0	120.0	PASS

**Environmental Health Laboratories
Laboratory Method Blank Check**

File Name: MB-515A
Acquisition File: N040299A
Data Directory: 040299A
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400068
Sample Location: Not Available
Sample Description: LMB A L

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/02
Analysis Time: 20:22
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	6.341	ug/L	63.41	70.0	130.0
10386-84-2	IS-4,4'-Dibromo octafluorobiphenyl	5.0	ug/L	115.12	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
94-75-7	2,4-D	<	0.1	ug/L
94-82-6	2,4-DB	<	0.1	ug/L
50594-66-6	Aci fluorfen	<	0.5	ug/L
25057-89-0	Bentazon	<	0.1	ug/L
1918-00-9	Dicamba	<	0.1	ug/L
94-74-6	MCPA	<	0.1	ug/L
7085-19-0	Mecoprop	<	0.1	ug/L
1918-02-1	Picloram	<	0.1	ug/L

Additional Found Parameters

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**Environmental Health Laboratories
Laboratory Fortified Blank Check**

File Name: FB-515A
Acquisition File: N040299A
Data Directory: 040299A
Today's Date: 1999/08/23
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400067

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/02
Analysis Time: 20:45
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Description: LFB A L

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	8.443	ug/L	84.43	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	91.48	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	
94-75-7	2,4-D	10.0	8.24	ug/L	82.4	70.0	130.0	PASS
94-82-6	2,4-DB	10.0	8.639	ug/L	86.39	70.0	130.0	PASS
50594-66-6	Acifluorfen	10.0	7.52	ug/L	75.2	70.0	130.0	PASS
25057-89-0	Bentazon	10.0	7.332	ug/L	73.32	70.0	130.0	PASS
1918-00-9	Dicamba	10.0	8.845	ug/L	88.45	70.0	130.0	PASS
94-74-6	MCPA	10.0	9.073	ug/L	90.73	70.0	130.0	PASS
7085-19-0	Mecoprop	10.0	8.517	ug/L	85.17	70.0	130.0	PASS
1918-02-1	Picloram	10.0	7.116	ug/L	71.16	70.0	130.0	PASS

**CHLORINATED ACID PESTICIDES - GC/MS TUNING
AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: N040299A
 Contract: BAA 97-044 Task: 4A Data Directory: N\040299A
 Project: IDEM - Pesticide Network Case: n/a Initial Cali File: 0326GON
 Column: Restek XTI-5 30m x 0.25mm ID Method: 515.1 Instrument ID: GC/MS - N

m/e	Ion Abundance Criteria	% Rel Abundance	Q	Matrix	Code
51	10 to 80% of base peak	31.17		Reagent Water	RW
68	< 2% of Mass 69	0.00		Surface Water	SW
70	< 2% of Mass 69	0.00		Drinking Water	DW
127	10 to 80% of base peak	26.85		Ground Water	GW
197	< 2% of Mass 198	0.00		Waste Water	WW
198	base peak or > 50 % of mass 442	100.00		Sediment	SE
199	5 to 9% of mass 198	7.60		Soil	SO
275	10 to 60% of base peak	22.87		Sludge	SL
365	> 1% of base peak	3.07		Other Solvents	OS
441	Present and < mass 443	15.31		TCLP Leachate	TC
442	base peak or > 50 % of mass 198	74.27		Hazardous Waste	HW
443	15 to 24% of mass 442	20.47		Contamination Levels: L=Low M=Medium H=High	

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm Level
1	Tune 2	TI-DFN2	04/03/99	03:10	OS	
2	Continuing Calibration Check C	C-2-06C	04/03/99	03:29	OS	
3	DK 12534	397690	04/03/99	05:24	GW	L
4	DK 12526	397662	04/03/99	05:46	GW	L
5	DK 12526 Matrix Spike	397663-S	04/03/99	06:09	GW	
6	DK 12526 Matrix Spike Duplicate	397664SD	04/03/99	06:31	GW	
7	QCS A	Q-515A	04/03/99	06:53	RW	
8	Continuing Calibration Check D	C-5-06D	04/03/99	07:15	OS	
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Q = A flag or qualifier indicating possible cause for an out of range reading.

Comments:

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-2-06C
Acquisition File: N040299A
Data Directory: 040299A
Today's Date: 1999/08/23
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400065

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/03
Analysis Time: 03:29
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Description: CCC C

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	97.11	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	2.0	1.97	ug/L	98.5	80.0	120.0	PASS
94-82-6	2,4-DB	2.0	1.858	ug/L	92.9	80.0	120.0	PASS
50594-66-6	Acifluorfen	2.0	1.82	ug/L	91.0	80.0	120.0	PASS
25057-89-0	Bentazon	2.0	1.783	ug/L	89.15	80.0	120.0	PASS
1918-00-9	Dicamba	2.0	1.82	ug/L	91.0	80.0	120.0	PASS
94-74-6	MCPA	2.0	1.97	ug/L	98.5	80.0	120.0	PASS
7085-19-0	Mecoprop	2.0	2.078	ug/L	103.9	80.0	120.0	PASS
1918-02-1	Picloram	2.0	1.796	ug/L	89.8	80.0	120.0	PASS

**Environmental Health Laboratories
Sample Result Record Sheet**

File Name: 397690 **Method:** 515.1 - IDEM
Acquisition File: N040299A **Calibration File:** 0326G0N
Data Directory: 040299A **Analysis Date:** 1999/04/03
Instrument: GC/MS - N **Analysis Time:** 05:24
Extracted Date: 1999/03/26 **Analyst:** george
Sample Number: 397690 **Results Submitted By:** brown
Sample Location: Not Available **Run Number:** 18090
Sample Description: IDEM DK12534

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	7.745	ug/L	77.45	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	97.38	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
94-75-7	2,4-D	<	0.1	ug/L
94-82-6	2,4-DB	<	0.1	ug/L
50594-66-6	Acifluorfen	<	0.5	ug/L
25057-89-0	Bentazon	<	0.1	ug/L
1918-00-9	Dicamba	<	0.1	ug/L
94-74-6	MCPA	<	0.1	ug/L
7085-19-0	Mecoprop	<	0.1	ug/L
1918-02-1	Picloram	<	0.1	ug/L

Additional Found Parameters

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**Environmental Health Laboratories
Sample Result Record Sheet**

File Name: 397662 **Method:** 515.1 - IDEM
Acquisition File: N040299A **Calibration File:** 0326G0N
Data Directory: 040299A **Analysis Date:** 1999/04/03
Instrument: GC/MS - N **Analysis Time:** 05:46
Extracted Date: 1999/03/26 **Analyst:** george
Sample Number: 397662 **Results Submitted By:** brown
Sample Location: Not Available **Run Number:** 18090
Sample Description: IDEM DK12526

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	7.412	ug/L	74.12	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	104.66	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
94-75-7	2,4-D	<	0.1	ug/L
94-82-6	2,4-DB	<	0.1	ug/L
50594-66-6	Acifluorfen	<	0.5	ug/L
25057-89-0	Bentazon	<	0.1	ug/L
1918-00-9	Dicamba	<	0.1	ug/L
94-74-6	MCPA	<	0.1	ug/L
7085-19-0	Mecoprop	<	0.1	ug/L
1918-02-1	Picloram	<	0.1	ug/L

Additional Found Parameters

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

CHLORINATED ACID PESTICIDES
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Environmental Health Laboratories
 Contract: BAA 97-044
 Project: IDEM - Pesticide Network
 Column: Restek XTI-5 30m x 0.25mm ID
 Sample Number/Description: 397662 / IDEM DK 12526

Lab ID: unknown
 Task: 4A
 Case: na
 Method: 515.1
 Matrix: GW

Acq. File: N040299A
 Data Directory: 040299A
 Initial Cali File: 0326G0N
 Instrument ID: GC/MS - N
 MS Data File: 397663-S
 MSD Data File: 397664SD

Compound	Spike Added	Sample Conc	MS Conc	MS % Rec	MS % Recovery	MSD Conc	MSD % Rec	MSD % Recovery	MSD RPD	MSD % Recovery	MSD RPD
			Limits	Q	Limits	Q	Limits	Q	RPD	Limits	Q
Acifluorfen	10.0	NF	7.192	71.9	70 - 130	8.645	86.5	70 - 130	18.3	20%	
Bentazon	10.0	NF	6.481	64.8	70 - 130	*	7.098	71.0	70 - 130	9.1	20%
2,4-D	10.0	NF	7.482	74.8	70 - 130		8.085	80.9	70 - 130	7.7	20%
2,4-DB	10.0	NF	7.674	76.7	70 - 130		8.548	85.5	70 - 130	10.8	20%
Dicamba	10.0	NF	7.624	76.2	70 - 130		9.040	90.4	70 - 130	17.0	20%
MCPA	10.0	NF	8.346	83.5	70 - 130		9.292	92.9	70 - 130	10.7	20%
Mecoprop	10.0	NF	8.075	80.8	70 - 130		8.904	89.0	70 - 130	9.8	20%
Picloram	10.0	NF	6.749	67.5	70 - 130	*	7.119	71.2	70 - 130	5.3	20%

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

NF = Not Found

% Rec = (MS Conc - Sample Conc) x 100 / Spike Added

RPD (Relative % Difference) = abs(MS Conc - MSD Conc) x 100 / ((MS Conc + MSD Conc) / 2)

Comments:

Environmental Health Laboratories

Environmental Health Laboratories
Quality Control Sample Check

File Name: Q-515A
Acquisition File: N040299A
Data Directory: 040299A
Today's Date: 1999/08/23
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400069

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/03
Analysis Time: 06:53
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Description: QCS A L

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	8.292	ug/L	82.92	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	101.76	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits					
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
94-75-7	2,4-D	2.0	1.556	ug/L	77.8	70.0	130.0
94-82-6	2,4-DB	2.0	1.545	ug/L	77.25	70.0	130.0
50594-66-6	Acifluorfen	2.0	1.727	ug/L	86.35	70.0	130.0
25057-89-0	Bentazon	2.0	1.416	ug/L	70.8	70.0	130.0
1918-00-9	Dicamba	2.0	1.468	ug/L	73.4	70.0	130.0
94-74-6	MCPA	2.0	1.539	ug/L	76.95	70.0	130.0
7085-19-0	Mecoprop	2.0	1.926	ug/L	96.3	70.0	130.0
1918-02-1	Picloram	2.0	1.417	ug/L	70.85	70.0	130.0

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: C-2-06D
Acquisition File: N040299A
Data Directory: 040299A
Today's Date: 1999/08/23
Instrument: GC/MS - N
Extracted Date: 1999/03/26
Sample Number: 400066

Method: 515.1 - IDEM
Calibration File: 0326G0N
Analysis Date: 1999/04/03
Analysis Time: 07:15
Analyst: george
Results Submitted By: brown
Run Number: 18090

Sample Description: CCC D

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	106.18	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	2.0	1.668	ug/L	83.4	80.0	120.0	PASS
94-82-6	2,4-DB	2.0	1.75	ug/L	87.5	80.0	120.0	PASS
50594-66-6	Acifluorfen	2.0	1.425	ug/L	71.25	80.0	120.0	*FAIL*
25057-89-0	Bentazon	2.0	1.636	ug/L	81.8	80.0	120.0	PASS
1918-00-9	Dicamba	2.0	1.68	ug/L	84.0	80.0	120.0	PASS
94-74-6	MCPA	2.0	1.868	ug/L	93.4	80.0	120.0	PASS
7085-19-0	Mecoprop	2.0	1.937	ug/L	96.85	80.0	120.0	PASS
1918-02-1	Picloram	2.0	1.497	ug/L	74.85	80.0	120.0	*FAIL*

08/23/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

	IS1 Area	IS1 RT
CCC Standard	188308	8.2992
CCC Upper Limit	244800.4	N/A
CCC Lower Limit	131815.6	N/A
Init Cali Lower Limit	N/A	N/A

Sample No.	Filename	IS1 Area	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1. 400064 / CCC	C-2-06B	194812		8.2992		103.45		OS

|S1 = |S-4,4'-Dibromoctafluorobiphenyl

Q = Out of Range

08/23/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

	IS1 Area	IS1 RT
CCC Standard	194812	8.2992
CCC Upper Limit	253255.6	N/A
CCC Lower Limit	136368.4	N/A
Init Cali Lower Limit	N/A	N/A

Sample No.	Filename	IS1 Area	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1. 400068 / LMB	MB-515A	224269	8.3002	115.12	RW			
2. 400067 / LFB	FB-515A	178220	8.2992	91.48	RW			
3. 400065 / CCC	C-2-06C	189181	8.2992	97.11	OS			

IS1 = IS-4,4'-Dibromo-octafluorobiphenyl

Q = Out of Range

08/23/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

	IS1 Area	IS1 RT
CCC Standard	189181	8.2992
CCC Upper Limit	245935.3	N/A
CCC Lower Limit	132426.7	N/A
Init Cali Lower Limit	N/A	N/A

Sample No.	Filename	IS1 Area	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1.	397690 / FS	397690	184226	8.3002	97.38	GW		
2.	397662 / FS	397662	197994	8.3157	104.66	GW		
3.	397663 / MS	397663-S	183726	8.2992	97.12	GW		
4.	397664 / MSD	397664SD	186221	8.3157	98.44	GW		
5.	400069 / QCS	Q-515A	192504	8.2992	101.76	RW		
6.	400066 / CCC	C-2-06D	200873	8.2983	106.18	OS		

IS1 = IS-4,4'-Dibromoocatafluorobiphenyl
Q = Out of Range

08/23/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Surrogate Percent Recovery**

SS1	Upper Limit	Lower Limit
130.0	70.0	

Sample No. / Desc	Filename	SS1	Target %Rec	Q	Tot Matrix
1. 400068 / LMB	MB-515A	6.341	5.0	63.41	Q 1 RW
2. 400067 / LFB	FB-515A	8.443	5.0	84.43	0 RW
3. 397690 / FS	397690	7.745	5.0	77.45	0 GW
4. 397662 / FS	397662	7.412	5.0	74.12	0 GW
5. 397663 / MS	397663-S	7.722	5.0	77.22	0 GW
6. 397664 / MSD	397664SD	9.026	5.0	90.26	0 GW
7. 400069 / QCS	Q-515A	8.292	5.0	82.92	0 RW

SS1 = SS-2,4-Dichlorophenylacetic acid

Q = Out of Range

**CHLORINATED ACID PESTICIDES
INITIAL CALIBRATION**

Lab Name: Environmental Health Laboratories
 Contract: BAA 97-044
 Project: IDEM - Pesticide Network
 Column: Restek XTI-5 30m x 0.25mm ID

Lab ID: unknown
 Task: 4A
 Case: n/a
 Method: 515.1

Acq. File: N040299A
 Data Directory: N\040299A
 Initial Cali File: 0326G0N
 Instrument ID: GC/MS - N

Compound	Data File / Sample ID:		Concentration: 0.1 ug/L	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	% RSD	Corr Coeff	Q
	0.5 ug/L	1 ug/L												
Acifluorfen	2.039	3.112	2.512	2.781	3.265	3.275	2.755	2.820	15.9	0.996				
Bentazon	10.754	11.499	8.492	9.343	9.769	8.104	----	9.660	13.5	0.997				
2,4-D	2.922	4.341	3.654	3.918	4.889	4.348	4.421	4.071	15.7	0.999				
2,4-DB	6.701	7.479	6.259	6.247	8.021	7.799	----	7.084	11.1	0.997				
Dicamba	6.319	7.116	5.635	6.106	6.103	6.857	----	6.356	8.5	0.999				
MCPA	1.831	2.555	2.115	2.281	2.704	2.794	2.885	2.452	15.8	0.997				
Mecoprop	1.532	2.106	1.554	1.924	2.910	2.957	----	2.164	29.4	0.985	*			
Picloram	4.705	6.742	5.201	5.398	5.560	4.601	----	5.368	14.4	0.996				

Avg RF = Average response factor

Max %RSD = 20% for a linear fit

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 515.1 - CHLORINATED ACID PESTICIDES

Lab Name: Environmental Health Laboratories
 Project: Routine MDL
 Column: Restek XTI-5 30m x 0.25um ID
 Extraction Technique: LSE
 Matrix Code: RW

Extract. Vol: 500 mL
 Disk: 47 mm
 Cartridge: NA
 Method: 515.1
 LSE Matrix: RPS

Acq. File: A011399A
 Data Directory: N011399A
 Initial Cali Data: 0105G0N
 Instrument ID: GC/MS - N

Method	CAS #	Parameter	Target	Data File M-02-06A M-02-06B M-02-06C M-02-06D M-02-06E M-02-06F M-02-06G							Std. Deviation	Calc. MDL	Units
				Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep - 5	Rep - 6	Rep - 7			
515.1	50594-66-6	Acifluorfen	0.2	0.274	0.235	0.231	0.273	0.263	0.253	0.242	0.018	0.055	ug/L
515.1	25057-89-0	Bentazone	0.2	0.233	0.227	0.228	0.234	0.233	0.227	0.228	0.003	0.010	ug/L
515.1	94-75-7	2,4-D	0.2	0.213	0.181	0.211	0.200	0.186	0.203	0.218	0.014	0.044	ug/L
515.1	94-82-6	2,4-DB	0.2	0.170	0.182	0.186	0.191	0.197	0.188	0.208	0.012	0.037	ug/L
515.1	1918-00-9	Dicamba	0.2	0.161	0.185	0.204	0.179	0.216	0.182	0.181	0.018	0.056	ug/L
515.1	94-74-6	MCPP	0.2	0.151	0.155	0.187	0.200	0.196	0.179	0.181	0.019	0.060	ug/L
515.1	7085-19-0	MCPP (Mecoprop)	0.2	0.179	0.185	0.208	0.184	0.201	0.175	0.196	0.012	0.038	ug/L
515.1	1918-02-1	Picloram	0.2	0.142	0.152	0.221	0.158	0.176	0.177	0.141	0.028	0.088	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.
 LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction

LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8, RPS

Comments:

CARBAMATE PESTICIDES
METHOD BLANK SUMMARY

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A032999
 Contract: BAA 97-044 Task: 4A Data Directory: Q\A032999
 Project: IDEM / Pesticide Monitoring Network Case: n/a Initial Cali File: Q\A032999
 Column: Supelcosil LC-18-DB 15cm x 4.6mm Method: 531.1 Instrument ID: HPLC - Q
 Blank File: Q0329010 Ext Date: 03/01/99 Ext Method: Filtration

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Performance Check	Q0329002	03/29/99	18:05	RW	
2	Continuing Calibration Check	Q0329008	03/29/99	21:44	RW	
3	Laboratory Fortified Blank	Q0329009	03/29/99	22:21	RW	
4	Laboratory Method Blank	Q0329010	03/29/99	22:57	RW	
5	DK 12526 / EHL 397665	Q0329011	03/29/99	23:34	GW	L
6	DK 12526 Matrix Spike / EHL 397666	Q0329012	03/30/99	00:11	GW	
7	DK 12526 Matrix Spike Duplicate / EHL 397667	Q0329013	03/30/99	00:47	GW	
8	DK 12534 / EHL 397691	Q0329014	03/30/99	01:24	GW	L
9	Continuing Calibration Check	Q0329021	03/30/99	05:40	RW	
10	Quality Control Sample	Q0329034	03/30/99	13:36	RW	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

**CARBAMATE PESTICIDES
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A032999
 Contract: BAA 97-044 Task: 4A Data Directory: QVA032999
 Project: IDEM / Pesticide Monitoring Network Case: n/a Initial Cali File: QVA032999
 Column: Supelcosil LC-18-DB 15cm x 4.6mm ID Method: 531.1 Instrument ID: HPLC - Q
 Data File: Q0329002

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
3-Hydroxycarbofuran	Sensitivity	2.0	Detection of analyte: S/N > 3	> 3	Pass	
Aldicarb Sulfoxide	Chromatographic Performance	100	0.90 < PGF < 1.10 (a)	0.947	Pass	
Methiocarb		20				
4-Bromo-3,5-dimethyl phenyl N-methylcarbamate	Column Performance	10	Resolution > 1.0 (b)	1.10	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and w is the average peak width, at the baseline, of the two peaks.

Comments: _____

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: q0329008
Acquisition File: a032999
Data Directory: \q\032999
Today's Date: 1999/08/27
Instrument: HPLC - Q
Extracted Date: 1999/03/29
Sample Number: 398821

Method: 531.1
Calibration File: 032999Q
Analysis Date: 1999/03/29
Analysis Time: 21:44
Analyst: mccarty
Results Submitted By: mccarty
Run Number: 17925

Sample Description: CALIBRATION CHECK AT 2 ug/L.

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	100.0	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
116-06-3	Aldicarb	2.0	1.7412	ug/L	87.06	80.0	120.0	PASS
1563-66-2	Carbofuran	2.0	1.9263	ug/L	96.32	80.0	120.0	PASS
2032-65-7	Methiocarb	2.0	1.9767	ug/L	98.84	80.0	120.0	PASS
16752-77-5	Methomyl	2.0	1.9967	ug/L	99.84	80.0	120.0	PASS
23135-22-0	Oxamyl	2.0	1.9805	ug/L	99.02	80.0	120.0	PASS

**Environmental Health Laboratories
Laboratory Fortified Blank Check**

File Name: q0329009
Acquisition File: a032999
Data Directory: \q\ a032999
Today's Date: 1999/08/27
Instrument: HPLC - Q
Extracted Date: 1999/03/29
Sample Number: 398824

Method: 531.1
Calibration File: 032999Q
Analysis Date: 1999/03/29
Analysis Time: 22:21
Analyst: mccarty
Results Submitted By: mccarty
Run Number: 17925

Sample Description: LAB FORTIFIED BLANK AT 10 ug/L. FILTERED

3/29/99 CM 15:40-16:20.

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	95.53	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
116-06-3	Aldicarb	10.0	9.1135	ug/L	91.14	70.0	130.0	PASS
1563-66-2	Carbofuran	10.0	10.4446	ug/L	104.45	70.0	130.0	PASS
2032-65-7	Methiocarb	10.0	9.8912	ug/L	98.91	70.0	130.0	PASS
16752-77-5	Methomyl	10.0	10.3668	ug/L	103.67	70.0	130.0	PASS
23135-22-0	Oxamyl	10.0	10.1025	ug/L	101.02	70.0	130.0	PASS

**Environmental Health Laboratories
Laboratory Method Blank Check**

File Name: q0329010
Acquisition File: a032999
Data Directory: \q\ a032999
Instrument: HPLC - Q
Extracted Date: 1999/03/29
Sample Number: 398815
Sample Location: Not Available
Sample Description: LAB METHOD BLANK. FILTERED 3/29/99 CM

Method: 531.1
Calibration File: 032999Q
Analysis Date: 1999/03/29
Analysis Time: 22:57
Analyst: mccarty
Results Submitted By: mccarty
Run Number: 17925

15:40-16:20.

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	94.19	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
116-06-3	Aldicarb	<	0.5	ug/L
1563-66-2	Carbofuran	<	0.9	ug/L
2032-65-7	Methiocarb	<	1.0	ug/L
16752-77-5	Methomyl	<	0.5	ug/L
23135-22-0	Oxamyl	<	1.0	ug/L

Additional Found Parameters

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

Environmental Health Laboratories
Sample Result Record Sheet

File Name: q0329011 **Method:** 531.1
Acquisition File: a032999 **Calibration File:** 032999Q
Data Directory: \q\032999 **Analysis Date:** 1999/03/29
Instrument: HPLC - Q **Analysis Time:** 23:34
Extracted Date: 1999/03/29 **Analyst:** mccarty
Sample Number: 397665 **Results Submitted By:** mccarty
Sample Location: Not Available **Run Number:** 17925
Sample Description: DK12526. FILTERED 3/29/99 CM 15:40-16:20.

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	109.59	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
116-06-3	Aldicarb	<	0.5	ug/L
1563-66-2	Carbofuran	<	0.9	ug/L
2032-65-7	Methiocarb	<	1.0	ug/L
16752-77-5	Methomyl	<	0.5	ug/L
23135-22-0	Oxamyl	<	1.0	ug/L

Additional Found Parameters

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

CARBAMATE PESTICIDES
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: IDEM / Pesticide Monitoring Network
Column: Supelcosil LC-18-DB 15cm x 4.6mm ID
Sample Number/Description: 397665 / DK12526

Lab ID:	na	Acq. File:	A032999
Task:	4A	Data Directory:	\QVA032999Q
Case:	na	Initial Cali File:	032999Q
Method:	531.1	Instrument ID:	HPLC - Q
Matrix:	GW	MS Data File:	Q0329012
		MSD Data File:	Q0329013

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result

NF = Not Found

$$\text{% Rec} = \text{% Recovery} = (\text{MS Conc} - \text{Sample Conc}) \times 100 / \text{Spike Added}$$

$$\text{RPD} = \text{Relative Percent Difference} = \text{abs}(\text{MS Conc} - \text{MSSD Conc}) \times 100 / (\text{MS Conc} + \text{MSD Conc}) / 2$$

Comments

Environmental Health Laboratories

**Environmental Health Laboratories
Sample Result Record Sheet**

File Name: q0329014
Acquisition File: a032999
Data Directory: \q\032999
Instrument: HPLC - Q
Extracted Date: 1999/03/29
Sample Number: 397691
Sample Location: Not Available
Sample Description: DK12534. FILTERED 3/29/99 CM 15:40-16:20.

Method: 531.1
Calibration File: 032999Q
Analysis Date: 1999/03/30
Analysis Time: 01:24
Analyst: mccarty
Results Submitted By: mccarty
Run Number: 17925

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	100.54	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
116-06-3	Aldicarb	<	0.5	ug/L
1563-66-2	Carbofuran	<	0.9	ug/L
2032-65-7	Methiocarb	<	1.0	ug/L
16752-77-5	Methomyl	<	0.5	ug/L
23135-22-0	Oxamyl	<	1.0	ug/L

Additional Found Parameters

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**Environmental Health Laboratories
Continuing Calibration Check Check**

File Name: q0329021
Acquisition File: a032999
Data Directory: \ql\032999
Today's Date: 1999/08/27
Instrument: HPLC - Q
Extracted Date: 1999/03/29
Sample Number: 398822

Method: 531.1
Calibration File: 032999Q
Analysis Date: 1999/03/30
Analysis Time: 05:40
Analyst: mccarty
Results Submitted By: mccarty
Run Number: 17925

Sample Description: CALIBRATION CHECK AT 5 ug/L.

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	105.44	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
116-06-3	Aldicarb	5.0	4.2777	ug/L	85.55	80.0	120.0	PASS
1563-66-2	Carbofuran	5.0	4.863	ug/L	97.26	80.0	120.0	PASS
2032-65-7	Methiocarb	5.0	4.9511	ug/L	99.02	80.0	120.0	PASS
16752-77-5	Methomyl	5.0	4.6771	ug/L	93.54	80.0	120.0	PASS
23135-22-0	Oxamyl	5.0	4.6779	ug/L	93.56	80.0	120.0	PASS

**Environmental Health Laboratories
Quality Control Sample Check**

File Name: q0329034
Acquisition File: a032999
Data Directory: \q\032999
Today's Date: 1999/08/27
Instrument: HPLC - Q
Extracted Date: 1999/03/29
Sample Number: 398825

Method: 531.1
Calibration File: 032999Q
Analysis Date: 1999/03/30
Analysis Time: 13:36
Analyst: mccarty
Results Submitted By: mccarty
Run Number: 17925

Sample Description: QUALITY CONTROL SAMPLE AT 10 ug/L. FILTERED

3/29/99 CM 15:40-16:20.

Sample Quality Control

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Limits</u>	
					<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	98.37	70.0	130.0

Ordered Parameter Results

<u>CAS No.</u>	<u>Parameter</u>	<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Limits</u>		<u>Pass/Fail</u>
						<u>Lower</u>	<u>Upper</u>	
116-06-3	Aldicarb	10.0	8.4911	ug/L	84.91	70.0	130.0	PASS
1563-66-2	Carbofuran	10.0	9.6	ug/L	96.0	70.0	130.0	PASS
2032-65-7	Methiocarb	10.0	9.5497	ug/L	95.50	70.0	130.0	PASS
16752-77-5	Methomyl	10.0	9.5577	ug/L	95.58	70.0	130.0	PASS
23135-22-0	Oxamyl	10.0	9.4407	ug/L	94.41	70.0	130.0	PASS

08/27/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

	IS1 Area	IS1 RT
CCC Standard	148019	26.124
CCC Upper Limit	192424.7	N/A
CCC Lower Limit	103613.3	N/A
Init Cali Lower Limit	N/A	N/A

Sample No.	Filename	IS1 Area	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1.	398824 / LFB	q0329009	141405	26.146		95.53		RW
2.	398815 / LMB	q0329010	139423	26.087		94.19		RW
3.	397665 / FS	q0329011	162216	26.069		109.59		GW
4.	397666 / MS	q0329012	157757	26.044		106.58		GW
5.	397667 / MSD	q0329013	161980	26.028		109.43		GW
6.	397691 / FS	q0329014	148816	26.129		100.54		GW
7.	398822 / CCC	q0329021	156068	25.985		105.44		RW

IS1 = 4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate

Q = Out of Range

08/27/99

**Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary**

	IS1 Area	IS1 RT
CCC Standard	156068	25.985
CCC Upper Limit	202888.4	N/A
CCC Lower Limit	109247.6	N/A
Init Cali Lower Limit	N/A	N/A

Sample No.	Filename	IS1 Area	Q	IS1 RT	Q	IS1 %Rec	Q	Matrix
1. 398825 / QCS	q0329034	153518		25.979		98.37		RW

IS1 = 4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate
Q = Out of Range

CARBAMATE PESTICIDES INITIAL CALIBRATION

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A032999
Contract: BAA 97-044 Task: 4A Data Directory: Q\A032999
Project: IDEM / Pesticide Monitoring Network Case: n/a Initial Cali File: Q\A032999
Column: Supelcosil LC-18-DB 15cm x 4.6mm Method: 531.1 Instrument ID: HPLC - Q

Avg RF = Average result factor

Max %RSD = 20%

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS METHOD 531.1 - CARBAMATE PESTICIDES

Tech: CM
Date: 01/13/99

Lab Name: Environmental Health Laboratories

Contract.

Digitized

100

SUGAR AND SODA-ACID

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Data File q1

Initial Cali Data:	See comments
Instrument ID:	HPLC (Q)

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

COMMENTS Acq. File: Q\A110698, Q\A111198, Q\A111898, Q\A112498, Q\A120298, Q\A102898, C:\QVA110298
Data Directory: Q\A110698, Q\A111198, Q\A111898, Q\A112498, Q\A120298, Q\A102898, Q\A110298.
Initial Calibration Data: Q\A102898, Q\A111898.

INORGANIC ANALYSES

BLANKS

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Analyzed: see below
Project: IDEM / Pesticide Monitoring Network Case: n/a Blank Matrix: Reagent Water
Method: see below Conc Units: see below

Parameter	Instrument	Method	Units	Analysis Date	Init Cali Blank	Continuing Cali	Blank	Prep Blank	Q
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99	< 0.5	< 0.5	---	---	< 0.5

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES
INSTRUMENT PERFORMANCE CHECK

Instrument Performance Check				
Parameter	True	Found	% R (1)	Q
Nitrogen, Nitrate-Nitrite	2.5	2.401	96.0	

Parameter	Instrument	Method	Units	Analysis Date
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99

(1) Control Limits: 90-110

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
QUALITY CONTROL SAMPLE**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Instrument ID: see below
Contract: BAA 97-044	Task: 2	Date Analyzed: see below
Project: IDEM / Pesticide Monitoring Network	Case: n/a	Matrix Code: RW
Sample ID: QCS	Method: see below	Conc Units: see below

Parameter	Instrument	Method	Units	Analysis Date	True	Found	Percent Recovery (1)	Q
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99	4.0	4.187	104.7	

(1) Control Limits: 90-110

Percent Recovery = Found * 100 / True

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397694 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12272

Parameter	Method	Sample	Analysis	Instrument	Dupl.	Analysis	Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer	< 0.5	mg/L	03/26/99

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES
SPIKE SAMPLE RECOVERY

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Instrument ID:	see below
Contract:	BAA 97-044	Task:	2	Date Analyzed:	see below
Project:	IDEML / Pesticide Monitoring Network	Case:	n/a	Matrix Code:	GW
Sample ID:	397695	Method:	see below	Conc Units:	see below

Parameter	Instrument	Method	Units	Analysis Date	Spike Amount	Spike Result	Sample Result	Percent Recovery (1)	Q
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99	3.0	3.322	NF	110.7	*

Analysis Date	Spike Dup Amount	Spike Dup Result	Sample Result	Percent Recovery (1)	Q
03/26/99	3.0	3.314	NF	110.5	*

(1) Control Limits: 90-110

Percent Recovery = $(\text{Spike Result} - \text{Sample Result}) * 100 / \text{Spike Amount}$

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

NF = Not found

Comments: _____

INORGANIC ANALYSES

INSTRUMENT PERFORMANCE CHECK

Instrument Performance Check				
Parameter	True	Found	% R (1)	Q
Nitrogen, Nitrate-Nitrite	2.5	2.644	105.8	

Parameter	Instrument	Method	Units	Analysis Date
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99

(1) Control Limits: 90-110

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

BLANKS

Lab Name: Environmental Health Laboratories

Lab ID: unknown

Instrument ID: see below

Contract: BAA 97-044

Task: 2

Date Analyzed: see below

Project: IDEM / Pesticide Monitoring Network

Case: n/a

Blank Matrix: Reagent Water

Method: see below

Conc Units: see below

Parameter	Instrument	Method	Units	Analysis Date	Init Cali Blank	Continuing Cali	Blank	Prep Blank	Q
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

INSTRUMENT PERFORMANCE CHECK

Parameter	Instrument Performance Check			Q
	True	Found	% R (1)	
Nitrogen, Nitrate-Nitrite	2.5	2.405	96.2	

Parameter	Instrument	Method	Units	Analysis Date
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99

(1) Control Limits: 90-110

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

na = not applicable

Comments:

INORGANIC ANALYSES
QUALITY CONTROL SAMPLE

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Analyzed: see below
 Project: IDEM / Pesticide Monitoring Network Case: n/a Matrix Code: RW
 Sample ID: QCS Method: see below Conc Units: see below

Parameter	Instrument	Method	Units	Analysis Date	True	Found	Percent Recovery (1)	Q
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99	4.0	4.117	102.9	

(1) Control Limits: 90-110

Percent Recovery = Found * 100 / True

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397697 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12267

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

DATA SHEET

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Instrument ID:	see below
Contract:	BAA 97-044	Task:	2	Date Received:	03/13/99
Project:	IDEML / Pesticide Monitoring Network	Case:	n/a	Date Analyzed:	see below
Matrix Code:	GW	Method:	see below	Contm. Level:	L
Sample ID:	397698	Dil. Factor:	1		
Duplicate ID:		Dupl Type:			
EPA Sample No./Sample Description:	DK 12268				

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

IQ = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397699 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12266

Parameter	Method	Sample	Conc.	Units	Analysis	Date	Instrument	Dupl.	Conc.	Units	Analysis	Date	Q
Nitrogen, Nitrate-Nitrite	353.2		1.2	mg/L	03/26/99		Perstorp Analyzer						

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
 Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
 Matrix Code: GW Method: see below Contm. Level: L
 Sample ID: 397700 Dil. Factor: 1
 Duplicate ID: Dupl Type:
 EPA Sample No./Sample Description: DK 12265

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
 Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
 Matrix Code: GW Method: see below Contm. Level: L
 Sample ID: 397701 Dil. Factor: 1
 Duplicate ID: Dupl Type:
 EPA Sample No./Sample Description: DK 12264

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

INSTRUMENT PERFORMANCE CHECK

Instrument Performance Check				
Parameter	True	Found	% R (1)	Q
Nitrogen, Nitrate-Nitrite	2.5	2.475	99.0	

Parameter	Instrument	Method	Units	Analysis Date
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99

(1) Control Limits: 90-110

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397702 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12262

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397703 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12263

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397704 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12280

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
 Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
 Matrix Code: GW Method: see below Contm. Level: L
 Sample ID: 397707 Dil. Factor: 1
 Duplicate ID: Dupl Type:
 EPA Sample No./Sample Description: DK 12278

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

DATA SHEET

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397708 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12277

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

DATA SHEET

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397709 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12281

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

|Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

DATA SHEET

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397712 Dil. Factor: 1
Duplicate ID: Duplic Type:
EPA Sample No./Sample Description: DK 12283

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

|Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397713 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12279

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397714 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12282

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397715 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12254

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

INSTRUMENT PERFORMANCE CHECK

Parameter	Instrument Performance Check			Q
	True	Found	% R (1)	
Nitrogen, Nitrate-Nitrite	2.5	2.405	96.2	

Parameter	Instrument	Method	Units	Analysis Date
Nitrogen, Nitrate-Nitrite	Perstorp Analyzer	353.2	mg/L	03/26/99

(1) Control Limits: 90-110

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

na = not applicable

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
 Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
 Matrix Code: GW Method: see below Contm. Level: L
 Sample ID: 397718 Dil. Factor: 1
 Duplicate ID: Dupl Type:
 EPA Sample No./Sample Description: DK 12255

Parameter	Method	Sample	Conc.	Units	Analysis Date	Instrument	Dupl.	Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer						

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
 Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
 Matrix Code: GW Method: see below Contm. Level: L
 Sample ID: 397719 Dil. Factor: 1
 Duplicate ID: Dupl Type:
 EPA Sample No./Sample Description: DK 12256

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

DATA SHEET

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397741 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12257

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

DATA SHEET

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
Matrix Code: GW Method: see below Contm. Level: L
Sample ID: 397742 Dil. Factor: 1
Duplicate ID: Dupl Type:
EPA Sample No./Sample Description: DK 12258

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

**INORGANIC ANALYSES
DATA SHEET**

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
 Contract: BAA 97-044 Task: 2 Date Received: 03/13/99
 Project: IDEM / Pesticide Monitoring Network Case: n/a Date Analyzed: see below
 Matrix Code: GW Method: see below Contm. Level: L
 Sample ID: 397743 Dil. Factor: 1
 Duplicate ID: Dupl Type:
 EPA Sample No./Sample Description: DK 12259

Parameter	Method	Sample Conc.	Units	Analysis Date	Instrument	Dupl. Conc.	Units	Analysis Date	Q
Nitrogen, Nitrate-Nitrite	353.2	< 0.5	mg/L	03/26/99	Perstorp Analyzer				

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

INORGANIC ANALYSES

INSTRUMENT PERFORMANCE CHECK

Lab Name: Environmental Health Laboratories Lab ID: unknown Instrument ID: see below
Contract: BAA 97-044 Task: 2 Conc Units: see below
Project: IDEM / Pesticide Monitoring Network Case: n/a
Method: see below

Instrument Performance Check			
True	Found	% R (1)	Q
2.5	2.377	95.1	

Instrument	Method	Units	Analysis Date
Perstorp Analyzer	353.2	mg/L	03/26/99

(1) Control Limits: 90-110

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

na = not applicable

Comments: